Appl

Appl Appl Appl Appl

Perfect score:

Title:

Sequence:

OM nucleic

ou:

Run

Scoring table:

Minimum DB seq Maximum DB seq Total number

Searched:

```
12, Appl
4, Appli
1, Appli
59, Appl
                                                                                                                                                                                                            Appli
, Appl
Appli
                                                                               Sequence 124, App
Sequence 65, Appl
                                                                                                                                                                                                                                              Appli
, Appl
, Appl
, Appli
                                                                                                                                Appli
Appli
Appli
Appli
Appli
Appl
                                                                                                                                                                                                                                                                                                                                                   Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                         Sequence 11093, A
Sequence 1598, Ap
Sequence 2, Appli
                                                                                                                                                                                                                                                                                                                                                                                                           Appli
, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 14622,
Sequence 201, Ap
                                                                                                                                                    Sequence 3, 1
Sequence 10,
                                                                                                                                                                          Sequence 69,
Sequence 51,
Sequence 5,
Sequence 70,
Sequence 2,
Sequence 6, 2
Sequence 6, 2
                                                                       Sequence 59,
                                                                                                                                                                                                                                                                                                                                        99
                                                                                                                                                                                                                                                                                                                            Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2,
                                                                                              Sequence (
                                      Seguence
                                                             Seguence
                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                     Sequence
Sequence
                                               Sequence
                                                                                                                     Sequence
                                                                                                                              Sequence
                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                   Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 390
US-10-156-761-10907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-156-761-14622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-200-562-201
US-10-237-551-201
US-10-237-551-250
US-10-237-551-250
US-10-200-562-161
                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-816-860A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: No. US20020177565Alan, Garry P.
APPLICANT: Hitcshi, Yasumichi
ITLE OF INVENTION: TOSO
FILE REFERENCE: A65635-1/DJG/RMS
CURRENT APPLICATION NUMBER: US/09/135,238B
CURRENT FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: 60/066,063
PRIOR FILING DATE: 1997-11-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/09135238B Patent No. US20020177565A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8.09e-133
2047.00
                                                        Patentin Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS:
SOFTWARE: Patentin Ve
                                                                                                                                       Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-135-238B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-135-238B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 390
                                                                                                                                                                                                                               182
182
182
175.5
170.5
168.5
167.5
167.5
167.5
                                                                                                                                                                                                                                                                                                                                                167.5
167.5
                                                                                                                                                                                                                                                                                                                                                                      167
166.5
165.5
                                                                                                                                                                                                                                                                                                                                                                                                        158
157.5
157.5
156.5
155.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             153.5
153.5
153.5
153.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 2
   Score:
                                                                                                                                                                                                                                                                                                                                                                         MODEL=frame+_12P.model -DEV-xlh
-Q=/Cgn2_1/USPTO_spool/US09651150/runat_12092003_184345_9763/app_query.fasta_1.2055
-DB==Published_Applications_AA -OFMT=fastan -SUFFIX=rapb -MIMAITCH=0.1
-LOOPELAG -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=bitsum6.2
-TRANS=human40.cdi _LIST=45 -DCCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15. MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US09651150_eCGN_1_1.74_erunat_12092003_184345_9763
-NCPU=6 -LICPU=3 -NO_MMAP -LARGEQUERY -NGS_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -NGAPDP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                          6; Search time 64.5 Seconds (without alignments) 8646.160 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                               1 aaaggagtaagcagcgtgtc.......ttactctgtctccatccttt 1911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /cgn2_6/ptodata/2/pubpaa/US092_errep: *
/cgn2_6/ptodata/2/pubpaa/US092_MRW_PUB.pep: *
/cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep: *
/cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep: *
/cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*/cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*
                    Copyright (c) 1993 - 2003 Compugen Ltd
                                                     - protein search, using frame_plus_n2p model
         5.1.6
                                                                                                                                                                                                                                                             hits satisfying chosen parameters:
                                                                                                                                                                                                                                      541936 seqs, 145912426 residues
         GenCore version
                                                                            September 14, 2003, 04:06:46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                            Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Published_Applications_AA:*
                                                                                                                                                                    BLOSUM62
Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                  Maximum Match 100%
                                                                                                                                                                                                                                                                                    length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 08
                                                                                                                        US-09-651-150B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                  Command line parameters:
                                                                                                                                    3490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oŧ
```

Database :

Score

Result No.

Db 321 ArgAlaArgGlyAlaAspAlaAlaGlyThrGlyGluAlaProValProGlyProGlyAla 340 Qy 1094 CCGTTGCCCCCCCCCTCCAGGTGTCTCAATCTCCTGGCTCCATCTCTG 1153	US-09-866-050A-683 Sequence 683, Application US/09866050A Publication No. US20030040471A1 Sequence 683, Application US/09866050A Publication No. US20030040471A1 STACADAN	; SOTWARE: FastSEQ for Windows Version 4.0 ; SEQ ID NO 683 ; LENGTH: 255 ; TYPE: PRT ; ORGANISM: Mouse US-09-866-050A-683 Alignment Scores: 6.11e-43 Length: 255 Score: 741.00 Matches: 145 Percent Similarity: 69.65 Mismatches: 70 Best Local Similarity: 56.42 Mismatches: 70 Ouery Match: 11 Caps: 110413 Mismatches: 8 DB: 11 Caps: 11-2563	CCAGTALCAGGGCCCTGAGGATCCTC	Db 41 GlnLeuHisValArgMetTyrLeuCysArgGlnMetAlaLysProGLyIleCysSerTnr 60 Qy 254 GTGGTATCCACCAACTTCATCAAGGCAGAATACAAGGGCCGAGTTACTTGAAGCAA 313
Percent Similarity: 99.74% Conservative: 0 Best Local Similarity: 99.74% Mismatches: 1 Bust Local Similarity: 99.74% Mismatches: 1 58.65% Indels: 0 Caps: 0 Ca	194 GAAATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGAACATGTGCTACC 25 [1111	QY 434 AATGTCCACAGTGAATACGAGCCATCGGAAGAGCAGTGCCTGAGACTCCAAAA 493 [11] [11] [11] [11] [11] [11] [11] [11]	QY 674 CCCCGAACCTTCCTGCCATCCACTACAGCTCCAAAATCTCAGCTCTGGAGGGCCTGCT 733 Db 201 ProArgThrPheLeuProSerThrThrAlaSerLys1leSerAlaLeuGluGlyLeuLeu 220 QY 734 AAGCCCCAGACGCCAGCTACAACCACCACCACGCTGCACAGGCACTGGAC 793 Db 221 LySProGInThrProSerTyrAsnHisHIPIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	3GCCGTTGAAAGG JALAVA1G1UARG JACCCTGGAGAGC

```
314 TACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGCGGA 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                254 GIGGIAICCACCACCAACTICAICAAGGCAGAATACAAGGGCCGAGTTACTCIGAAGCAA 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      434 AATGTCCACAGTGAATAC---GAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCA 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MetAspPheTrpLeuTrpLeuLeuTyrPheLeuProValSerGlyAlaLeuArgValLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               134 CCAGAAGTAAAGGTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCCACTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194 GAAATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGTGGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JUCANT: Strachan, James D.

JUCANT: Strachan, Lorna
JUCANT: Steam, Matthew
JUCANT: Steeman, Matthew
JUCANT: Ordust, Rene
JUCANT: Ordust, Rene
JUCANT: Murison, James G.

JUCANT: Kunble, Krishanand D.

JUEANT: Kunble, Krishanand D.

JUE OF INVENTION: Compositions Isolated From Skin Cells

JUE OF INVENTION: Compositions for Their Use

JUEANT: JUCANT: 2000.1011c4U

RRENT APPLICATION NUMBER: US/09/866,050A

RRENT APLICATION NUMBER: US/09/866,050A

RRENT FILING DATE: 2001-05-24

JUMARE: FASLEEQ for Windows Version 4.0

ID NO 683

JUGTH: 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                             255
145
34
70
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -150B-1 (1-1911) x US-09-866-050A-683 (1-255)
Length:
Matches:
                                                             -050A-683
e 683, Application US/09866050A
tion No. US20030040471A1
iNFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               6.11e-43
741.00
69.65%
56.42%
21.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity:
al Similarity:
tch:
                                                                                                                                                                                                                                                                                                                                                                                                  IISM: Mouse
-050A-683
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scores:
```

```
ŎΣ
                                                           qq
                                                                                          ŏλ
                                                                                                                     Пр
                                                                                                                                                 ŏ
                                                                                                                                                                            QΩ
                                                                                                                                                                                                         φ
                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δŏ
535
                                                                                                      595
                                                                                                                  TCAGTAGCAGGTGACAAGCCCCGGAACCTTCCTGCCATCCACTACAGGCTCAAAAATCTCA 715
                                                                                                                                                                                                                                                                         116 GCTCTGGAGGGGTGCTCAAGCCCCAGACGCCCAGCTACAACCACCACCACCAGGCTGCAC 775
                                                                                                                                                                                                                                                                                            219
                                                                                                536 AGTICTICCAAATICGIAACCAGAGIIACCACACAGCICAAAGGGGCAAGGICCCICCA
                                             -GCATAIGCC
                                                                    140 ArgTrpLeuHisArgPheLeuGlnHisGlnMetProTrpLeuHisGlySerGluHisPro
                                                                                                                                                        596 GITCACCACTCCCCCCACCACCAAAICACCCACGCCCTCGAGIGTCCAGAGCAICT
                                                                                                                                                                                                                                        an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    an
                                                                                                                                                                                                                                                                                                                                  239 GluGlnArgThrArgHisHisGlyProHisTyrGlyArgGluAspArgGly 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: (13)...(16)
OTHER INFORMATION: The xaa at positions 13 through 16 represents of there information: unknown amino acid.
NAME/KEY: UNSURE
LICCATION: (44)...(48)
OTHER INFORMATION: The xaa at positions 44 through 48 represents of the information: unknown amino acid.
NAME/KEY: UNSURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: (61)...(62)
OTHER INFORMATION: The xaa at positions 61 and 62 represents
OTHER INFORMATION: unknown amino acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84
69
2
2
11
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-651-150B-1 (1-1911) x US-09-135-238B-3 (1-84)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
Indels:
                                          AAATGGTTTCATCTGCCCTATTTGTTCCAGATGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: No. US20020177565Alan, Garry P.
APPLICANT: No. US20020177565Alan, Garry P.
APPLICANT: Hitoshi, Yasumichi
TITLE OF INVENTION: TOSO
FILE REFERENCE: A65635-1/DJB/RMS
CURRENT APPLICATION NUMBER: US/09/135,238B
CURRENT FILING DATE: 1998-08-17
PRIOR FILING DATE: 1997-11-17
NUMBER OF SEQ ID NOS: 31
SOFTWARE: PATENTIN Ver. 2.0
SSOFTWARE: PATENTIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/09135238B Patent No. US20020177565A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8.01e-15
331.50
84.528
82.148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: UNSURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                           US-09-135-238B-3
             120
                                                                                                                                160
                                                                                                                                                                                                                  959
                                          491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
             g
                                                                                                                                                                                                                                                                                                     g
                                         Ω
                                                                    g
                                                                                                Q_{\overline{\mathbf{y}}}
                                                                                                                           q
                                                                                                                                                          ^{\circ}
                                                                                                                                                                                    g
                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                         Öλ
                                                                                                                                                                                                                                                                                                                                  δy
                                                                                                                                                                                                                                                                                                                                                               g
```

-AGGATATATCTG 217

GTTACCATCAAATGCCCACTTCCTGAAATGCATGTG

170

δ

```
971 CAGAGGCCCCGCGGGTCGCCGCGCGCGCTCCCAAAACAACATCTACAGCGCCTGCCCG 1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           277
                                                                                                                                                                                           ----AAGAATCTGTTCCTAGTGGAGGTAACACACGGTGACAGAAAGTGACAGCGGAGTC 376
                                                            21 CysArgGluAsnAlaGlySerGlyThrCysGlyThrValValSerThrThr***Pheile 40
                                                                                                                                                       9
                                                                                                                                                                                                               61 *****LysAsnLeuPheLeuValGluValThr***LeuThrGluSerAspSerGlyVal 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Morrison, Sherie L.
Chintalacharuvu, Kote R.
TITLE OF INVENTION: SECRETORY IMMUNOGLOBULIN PRODUCED
BY SINGLE CELLS AND METHODS FOR MAKING AND USING
1 ValThrIleLysCysProLeuProGluMetHisVal*********ArgIleTyrLys 20
                                                                                                                                     TGCCGGGAGATGGCTGGATCTGGAACATGTGGTACCGTGGTATCCACCACCACCTTCATC
                                                                                                               278 AAGGCAGAA------TACAAGGGCCGAGTTACTCTGAAGCAATACCCACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 4 0 0 0 0
E E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-651-150B-1 (1-1911) x US-09-135-238B-12 (1-43)
                                                                                                                                                                                                                                                                                                                                     Sequence 12, Application US/09135238B

Sequence 12, Application US/09135238B

Patent No. US20020177565A1

GENERAL INFORMATION:
APPLICANT: No. US20020177565A1an, Garry P.
APPLICANT: Hitoshi, Yasumichi
ITILE OF INVENTION: TOSO
FILE REPERENCE: A66535-1/DJB/RMS
CURRENT FILING DATE: 1998-08-17

PRIOR APPLICATION NUMBER: US/09/135,238B

CURRENT FILING DATE: 1998-08-17

PRIOR FILING DATE: 1997-11-17

NUMBER OF SEQ ID NOS: 31

SOFTWARE: PatentIn V~~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4, Application US/09950294 Patent No. US20020127645Al GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.37e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               233.00
100.00%
100.00%
6.68%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                  377 TATGCCTGCGGA 388
                                                                                                                                                                                                                                                                                          81 TyrAlaCysGly 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1091 GCGCCGTTG 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41 AlaProLeu 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-135-238B-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-950-294-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 43
                                    218
                                                                                                                                                                                         323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULI 5
```

171 561

----CCAAATTCGTAACCAGAGT

211

621

708 250 747 801

861 308 891 948

Mon

```
GAIGCGCGCCCIGGAGAGCICCCAGAGGCCCCGGGGGTCGCCGCGACGCGCGTCCCAAAA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----GACGCTGCAGGCACAGGGAGGCCCCCGTTCCCGGCCCCGGAGCGCCGTTGCC 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCCGCCCCCGCTGCAGGTGTCTGAATCTCCCTGGCTCCATGCCCCATGTGTGAAGACCAG 1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ::: ||||||||| :::::::: | ThrLeu-TrpArgThrThrValGluIleLys------IleIleGluGlyGluP 462
                                                                                                                                                                                                                                                                                 :: ||| :::
rgLeuSerAspAlaGlyGlnTyrLeuCysGlnAlaGlyAspAspSerAsnSerAsnLysL 231
                                                                                                                                                                                                                                                                                                                                                                                                              GlySerValThrPheHisCysAlaLeuGlyProGluValAlaAssnValAlaLysPheLeu 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         271 CysargGlnSerSerGlyGluAsnCysAspValValAshThrLeuGlyLysArgAla 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ServalvalIleThrGlyLeuArgLysGluAspAlaGlyArgTyrLeuCysGlyAlaHis 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              349 GluSer-----ThrileProArgSerProThrValVal-LysGlyValAlaGlySe 365
                                                                                                                                                                   171 uTyr-ProValLeuVallleAspSerSerGlyTyrValAsnProAsnTyrThrGlyArgI 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProAlaPheGluGlyArgIleLeuLeuAsnProGlnAspLysAsp-----GlySerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---AAGGGCCGTTGAAAGGAGGAAAGCCCTCTCCAGGCGGCCCGCCGCCGACTGGCCGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rSerValAlaValLeuCysProTyrAsnArgLysGluSerLysSerIleLysTyrTrpCy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      426 111eLeuAsnGlnLeuThrSerArgAspAlaGlyPheTyrTrpCysLeuThrAsnGlyAs
                                 144 uGlyArgThr-----ValThrlleAsnCysProPheLysThrGluAsnAlaGlnLysAr
                                                                                                                                                                                                                                                                                                                                        ACAGTCTGGGAGGGAAGGCCAAGGATTTCACATCCTGATCCCGACCATCCTGGGCCTTTT
              GGGAAAGACCCAGAAAGTCACCCTGAATGTCCACAGTGAATACGAGCCATCATGGGAAGA
                                                                        469 GCAGCCAATGCCTGAGACTCCAAAATGGTTTCATCTGCCCTATTTGTTCCAGATGCCTGC
                                                                                                                                                                                                 AGCATCTTCAGTAGCAGGTGACAAGCCCCGAACCTTCCTGCCATCCACTACAGCCTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                              -----CAGCTACAACCACCACCAGGCTGCACAGGCAGAGAGCACTGGACTATGGCTC
                                                                                                                                                                                                                                leargleuaspileGlnGlyThrGlyGlnLeuLeuPheSerValValIleAsnGlnLeuA
                                                                                                                                                                                                                                                                                                                                                                                   AATCTCAGCTCTGGAGGGGCTGCTCAAGCCCCAGACGCC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTGAATAC-----GTGAGCCTCTACCACCAGCCTGCC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACATCTACAGGGCCTGCCGGGGGGGGGGTGGAGGG--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGCTGGCACTTCTGGGGCTGGTGGAA------
                                                                                                                                                                                                                                                              AATCACCCACCCCCTCGAG----TGT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sLeuTrpGluGlyAlaGlnAsnGlyArg-
                                                                                                        162 gLysSerLeuTyrLys----
                                                                                                                                        529 ATATGCCAGITCTT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             446
                                                                                                                                                                                                                                                                                                                        649
                                                                                                                                                                                                                                                                                                                                                                                    709
                                                                                                                                                                                                                                                                                                                                                                                                                 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           395
                409
                                                                                                                                                                                                                                 191
                                                                                                                                                                                                                                                                622
                                                                                                                                                                                                                                                                                         211
                                                                                                                                                                                                                                                                                                                                                                                                                                                748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      408
                                                                                                                                                                                                                                                                                                                                                        231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                QQ
                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                      δŽ
                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                    ΩŸ
                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                ōλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΫ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΫ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 òγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                      qq
                                                                                                                                        QΫ́
                                                                                                                                                                    gg
                                                                                                                                                                                                                                                                Q\underline{y}
                                            QQ
                                                                           ΩŽ
                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----GAAATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATG 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ---GACCG 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79 CTTCIGGCTTTGGCCACTTTACTTCCTGCCAGTATCAGGGGCCCTGAGGATCCTCCCAGA 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            247 TGGTACCGTGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGCCCAGTTACTCT 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .---- 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rLeuGluValSerGlnGlyProGlyLeuLeuAsnAspThrLysValTyrThrValAspLe 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45 rSerValAsnArgHisThrArgLysTyrTrpCysArgGlnGlyAlaArgGlyGly---Cy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGA
ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
STREET: 11150 Santa Monica Boulevard, Suite 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      139 AGTAAAGGTAGAGGGGGGGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCGGAGTCTATGCCTGCGGAGCGGCATGAACACA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      608
1115
76
1186
1167
20
                                                                                                                                                        2.0
                                                                                                                                                                                                                            PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/095,385

FILING DATE: CURKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: Canady, Karen S
REGISTRATION NUMBER: 39,927

FEFERENCE/DOCKET NUMBER: 30,435,45USUI
TELEPHONE: 310 445-1140

TELEFANK: 310 445-9031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                      OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-651-150B-1 (1-1911) x US-09-950-294-4 (1-608)
                                                                                                                                                                                    APPLICATION NUMBER: US/09/950,294
FILING DATE: 10-Sep-2001
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7
                                                                                                                           COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE:: ownino acids

TYPE:: awino acid

STRANDEDRESS: unknown

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID

US-09-950-294-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A
                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 608 amino acids
                                                                                            JTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                        CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                      TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.22e-05
200.00
35.11$
21.14$
5.73$
                 STREET: 11150 Sant
CITY: Los Angeles
STATE: CA
                                                                USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104
                                                                                              COMPU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ōλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ōλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ΟŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ω
```

1195

407

us-09-651-150b-1.rapb

qa	426 lileLeuAsnGlnLeuThrSerArgAspAlaGlyPheTyrTrpCysLeuThrAsnGlyAs 446		
Qy	1196 -GCCATGATGGAGGACAGTGATTCAGATGACTACATGATGTTCCTGCCTG	QY	404
qa		qq	124
Qy	1255 CAGCTATCCCCCAACCCCAGGCTCGGACTGCGAAGGAGTCTCATCTATCT	QY	408
qq	::: rocassies	qa	144
Qy	CATCACTTCCCATGCCCCATCTCGA	δλ	469
QQ		qa	162
QY		Οŷ	523
qq	:: 490 er 490	qa	171
RESULT	7	Qy	562
o-60-Sn	US-09-981-353-59 ; Sequence 59, Application US/09981353	qa	191
	Patent No. US20020160382A1 GENERAL INFORMATION:	Qy	622
; APPL	APPLICANT: Lasek, Amy W. APPLICANT: Jones, David A.	qq	211
; TITE ; FILE	JE OF INVENTION: GENES EXPRESSED IN COLON CANCER P. REFERENCE: PA-0038 US	Qy	649
; CURE	RENT APPLICATION NUMBER: US/09/981,353	qa	231
NUME	NUMBER OF SEQ ID NOS: 194	Qy	709
SEQ I	SEQ ID NO 59 LENGTH: 764	qq	251
; TYP	TYPE: PRT ORGANISM: Homo camions	QY	748
FEA	FEATURE NAME/KRY: misc feature	ପ୍	271
HIO :	. OTHER INFORMATION: Incyte ID No. US20020160382A1 2680109CD1	Qy	802
Alianment	nt Scores	qu	291
Pred. N	1.25e-05 Length: 200.00 Matches	Qy	862
Percent Best Lo	Conservative: Mismatches.	qu	309
Query M	5.73% Indels: 10 Gaps:	Oy .	892
9-60-SD	-981-353-59 (1-764)	qq	329
: :		QY	949
δ 6 6	/9 CITCLGGCTTTGGCCACTTTACTTCCTGCCACTACGGGGCCCCTGAGGATCCTCCCAGA 138 6 Leuthtcvafenfanalavalbhabtnala-Tlagarthytvasgarbyntlobaglyub 25	qq	349
٥٥	ACTAAAAGGTAAGAGGGAAGCTAGGAGGATTAACAGTTAAAAAAAA	QY	1009
r da		qq	365
ΔO	GAAATGCATGAGGATATATGTGTGAGGATATATGTGTGTG	QY	1049
7 A		qq	385
Å0	TGGTACCGTGGTATCCACCACCACCACTACTACTACTACTACTACTACTAC	QY	1102
7 음	slleThreulleSerSerGluGlvTvValSerSerLvSTvrAlaGlaAvan	QQ	395
٥٥		Λō	1162
ପୁଘ		qa	408
ò		QY	1195
7. dd		qu	426
Ì	Poetetyntytynyselynedelyttenennestalytenenetrienelynetoe	_	

```
9 GAIGCGCCCCTGGAGAGCTCCCAGAGGCCCCGCGGGTCGCCGCGACCGCGCTCCCCAAAA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9 SerValValIleThrGlyLeuArgLysGluAspAlaGlyArgTyrLeuCysGlyAlaHis 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9 SerAspGlyGlnLeuGlnGluGlySerProlleGlnAlaTrpGlnLeuPheValAsnGlu 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9 GluSer-----ThrIleProArgSerProThrValVal-LysGlyValAlaGlySe 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9 -----GACGCTGCAGGCACAGGGGAGGCCCCCGTTCCCGGCCCCCGGAGCGCCCTTGCC 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 CCCCGCCCCGCTGCAGGTGTCTGAATCTCCCTGGCTCCATGCCCCATCTCTGAAGACCAG 1161
-GACCG 408
                                                                                                                                                                                                                                      99 GGGAAAGACCCAGAAAGTCACCCTGAATGTCCACAGTGAATACGAGCCATCATGGGAAGA 468
                                                                                                                                                                                                                                                                                                                                                      4 uGlyArgThr-----ValThrIleAsnCysProPheLysThrGluAsnAlaGlnLysAr 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59 GCAGCCAATGCCTGAGACTCCAAAATGGTTTCATCTGCCCTATTTGTTCCAGATGCCTGC 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---CCAG 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ysAsnAlaAspLeuGlnValLeuLysProGluProGlu-LeuValTyrGluAspLeuArg 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GlySerValThrPheHisCysAlaLeuGlyProGluValAlaAsnValAlaLysPheLeu 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CysArgGlnSerSerGlyGluAsnCysAspValValValAsnThrLeuGlyLysArgAla 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 ----AAGGGCCGTTGAAAGGAGGAAAAGCCCTCTCCAGGCGGCCCGCCGCCGACTGGCCGTGAG 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ::::::5
5 rSerValAlaValLeuCysProTyrAsnArgLysGluSerLysSerIleLysTyrTrpCy 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  :::|||
----GlnTyrGluGlyArgLeuSerLeuGluGluBroGlyAsnGlyThrPheThrVa 426
                                                                                                                24 rLeuGluValSerGlnGlyProGlyLeuLeuAsnAspThrLysValTyrThrValAspLe 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32 gLysSerLeuTyrLys------GinIleGlyLe 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9 ATATGCCAGTTCTT-------50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 -----CAGCIACAACCACCACCACGCTGCACAGGCAGAGAGCACTGGACTATGGCTC 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6 lileLeuAsnGlnLeuThrSerArgAspAlaGlyPheTyrTrpCysLeuThrAsnGlyAs 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 sLeuTrpGluGlyAlaGlnAsnGlyArg----- 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            :: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||| ::: ||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9 AGCAICITCAGTAGCAGGTGACAAGCCCCGGAACCTTCCTGCCATCCACTACAGCCTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 ACAGTCTGGGAGGGAAGGCCAAGGATTTCACATCCTGATCCCGACCATCCTGGGCCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9 AATCICAGCICIGGAGGGGCTGCTCAAGCCCCAGACGCC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9 CAACATCTACAGCGCCTGCCCGCGCGCGCGCTCGTGGAGCG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22 AATCACCCACCGCCCTCGAG----TGT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52 CCTGCTGGCACTTCTGGGGCTGGTGGTGAA-
)4
```

	104 pSerGlyArgTyrLysCysGlyLeuGlyIleAsnSerArgGlyLeuSerPheAspValSe 124	404GACCG 408	124 rLeuGluValSerGlnGlyProGlyLeuLeuAsnAspThrLysValTyrThrValAspLe 144	AGA	::: 144 uGlyArgThrValThrIleAsnCysProPheLysThrGluAsnAlaGlnLysAr 162	CTG	::: ::: ::: 162 glysSerLeuTyrLys	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	: 171 uTyr-ProValLeuVallleAspSerSerGlyTyrValAsnProAsnTyrThrGlyArgI 191	562 TACCACACAGCTCAAAGGGGCAAGGTCCCTCCAGTTCACCACTCCTCCCCCACCACCA 621	:: ::::: ::: 191 leArgLeuAspIleGlnGlyThrGlyGlnLeuLeuPheSerValValIleAsnGlnLeuA 211		::	IQLEGOCTASPATOCIYCIIIIYITEGCOXSCIINIACAYASPASPSCIASIOCIASIINA	AGCATCTTCAGIAGCAGGIGACAAGCCCGGAACCTTCCIGCCAICCACTACAGCCICAAA :::::	LeuLysProGluProGlu-LeuValTyrGluAsp	709 AATCTCAGCTCTGGAGGGCTGCTCAAGCCCCAGACGCC747	::: 251 GlySerValThrPheHisCysAlaLeuGlyProGluValAlaAsnValAlaLysPheLeu 270	748CAGCTACAACCACACAGGCTGCACAGGCAGAGAGCACTGGACTATGGCTC 801	::: CysArgGluSerSerGlyGluAsnCvsAspValValAsnThrLeuGlyLysArgAla		ACAGIC GGGAGGGAAGGCCAAGGATII CACATCC LGALCCCGACCAILII	291 ProAlaPheGluGlyArgIleLeuLeuAsnProGlnAspLysAspGlySerPhe 308	862 CCTGCTGGCACTTCTGGGGCTGGTGGA	309 SerValValIleThrGlyLeuArgLysGluAspAlaGlyArgTyrLeuCysGlyAlaHis 328	892aagggccgttgaaaggagaaagccctctccaggcggccgccccactggccgtgag 948	::: ::: :::	949 GAIGCGCCCCIGGAGAGTCCCAGAGGCCCCGCGGGTCGCCGCGACCGCGCTCCCAAAA 1008		1009 CAACATCIACAGGGCCTGCCGGGGGGGCGCTCGTGGAGCG	.::::::: rSerValalaValienOvsProffvrAsnArdIvsGluSerIvsSerIleIvsTvrTrnOv	LOCT VALENCAVAL DECACY SELECT TENSOR SOCIAL SOCIAL VALENCAY SELECT TO SELECT	GAUGUIGUAGAGAGAGAGAGAGAGAGUUUGAAGUUUGAAGUUGATTAUU :::	385 sLeuTrpGluGlyAlaGlnAsnGlyArg394	1102 CCCGGCCGGCTGCAGGTGTCTGAATGTCCCTGGCTCCATGCCCCATCTGAAGACCAG 1161	395CysProLeuLeuValAspSerGluGlyTrpValLysAla 407	1162 CIGIGAATACGIGAGCCICIACCACCAGCCIGCC		1195 1195	426 lileLeuAsnGlnLeuThrSerArgAspAlaGlyPheTyrTrpCysLeuThrAsnGlyAs 446
î	qq	QY	QQ	Qy	qq	Qy	QQ	QY	qq	QY	qa	ô	Z E	3 3	γo	qq	ΟŊ	qa	ò	- qa	i č	Š	qu	QY	qa	QY	qu	δy	qq	ΔO	1 12	a d	δŏ	qq	Qy	qq	Qy	QQ	QY	qq
COMPANY STATE OF THE STATE OF T	<pre>1196 -GCCATGATGGAGGACAGTGATTCAGATGACTACATCAATGTTCCTGCCTG</pre>	1,	Qy 1255 CAGCTATCCCCCAACCCCAGGCTGGGGGGGGGGGGGGGG	Db 462 roAsnLeuLysValProGlyAsnValThrAlaValL 474	QY 1315 TGTCCAATACCTGCTTCATGTGTTCTCAGAGCCCTCATCACTICCCATGCCCATCTCGA 1374	Db 474 euGlyGluThrLeuLysValProCysHisPheProCysLysPheSerS 490	Qy 1375 CT 1376	bb 490 er 490	RESULT 8	US-09-989-919-124 ; Sequence 124, Application US/09989919		; APPLICANT: Macina, Roberto ; APPLICANT: Recipon, Herve			; AFFILCANI: Liu, Chenghua ; TITLE OF INVENTION: Compositions and Methods Relating to Colon Specific Genes and Pro	4	CURRELL AFFICIATION NOMBER: US/03/303/313 ; CURRELL FILLIO DATE: 2001-11-12 ; PRICE ADDITIONATION FOR COLORS	; PRIOR FILING DATE: 2000-11-22	; NUMBER OF SEQ ID NOS: 124 ; SOFTWARE: PatentIn version 3.1	; SEQ ID NO 124 ; LENGTH: 764	TYPE: PRT ORGANISM	9-124	Alianment Scores:	1.26e-05 Length:	Percent Similarity: 35.11% Conservive: 76	Z1.14* Mismarches: 5.73* Indels:	10 Gaps:	12-12-13-13-13-13-13-13-13-13-13-13-13-13-13-	79 CTTCTGGCTTTGGCCACTTTACTTCCTGCCAGTATCAGGGGCCCTGAGGATCCTCCCAGA	Db 6 LeuThrCysLeuLeuAlaValPheProAla-IleSerThrLysSerProIlePheGlyPr 25	Qy 139 AGTAAAGGTAGAGGGGAGCTGGGCGGATCAGTTACCATCAAAAGCCCACTTCCT 193	Db 25 oGluGluValAsnSerValGluGlyAsnSerValSerIleThrCysTyrTyrProProTh 45	QY 194GAAATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGAACATG 246	Db 45 rSerValAsnArgHisThrArgLySTyrTrpCySArgGlnGlyAlaArgGlyGlyCy 64	Ø	64 eTlethrianTleSerSerSln3 varvVal SerSerToeTvrbleDeClvardlagenio		GARGCARTACCCACGCARGARICTGTTCTAGTGGAGGTAACACGTGACGTGACAGAGGGA	of dimensional and properties of the contract	QY 367 CAGCGGAGTCTATGCCTGCGGACGGGCATGAACACA

409 GGGAAAGACCCAGAAAGTCACCCTGAATGTCCACAGTGAATACGAGCCATCATGGGAAGA 468	562 TACCACACCACCTCAAGGGGCAAGGTCCCTCCAGTTCACCACTCCTCCCCCACCACCA 621 :::::: ::: 191 leargLeuaspIleGlnGlyThrGlyGlnLeuLeuPheSerValValTleAsnGlnLeuA 211		291 ProAlaPheGluGlyArgIleLeuLeuAsnProGlnAspLysAspGlySerPhe 308 862 CCTGCTGGCACTTCTGGGCTGGTGAA
oy da	QY		
State Stat	Oy 1375 CT 1376 :: Db 490 er 490	RESULT 9 18-09-949-039-65 18-09-949-039-65 18-09-949-039-65 18-09-949-039-65 18-09-949-039-65 18-09-049-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65 18-09-04-039-65	Alignment Scores: 1.26e

qq οy qq qq

Qγ

```
247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80 ITCTGGCTTTGGCCACTTTACTTCCTGCCAGTATCAGGGGCCCTGAGGATCCTCCCAGAA 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140 GTAAAGGTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCCACTTCCTGAA--- 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCCTGAATGTCCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACT 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---TyrThrLysAspileGly 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             248 GGTACCGTGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGTTACTCTG 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       308 AAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACACAGCTGACAGAAAGTGAC 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               368 AGCGGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCAGAAAGTC 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               488 CCAAAAIGGITTCAICIGCCCTAITIGITCCAGAIGCCIGCAIAIGCCAGITCTICCAAA 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65 ThrThrLeuIleSerSerAsnGlyTyrLeuSerLysGluTyrSerGlyArgAlaAsnLeu 84
                                                                                                                          Sequence 68, Application US/09949039
Publication No. US20030166160A1
GENERAL INFORMATION:
APPLICANT: HAWLEY, STEPHEN B.
TITLE OF INVENTION: COMPOUNDS AND MOLECULAR COMPLEXES COMPRISING MULTIPLE
TITLE OF INVENTION: BINDING REGIONS DIRECTED TO TRANSCYTOTIC LIGANDS
FILE REPERENCE: 057220/1301
CURRENT APPLICATION NUMBER: US/09/949,039
CURRENT FILING DATE: 2001-09-06
NUMBER OF SEQ ID NOS: 114
SOFTWARE: PATENTIN VEY. 2.1
SEQ ID NO 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26 GlnGluValSerSerIleGluGlyAspSerValSerIleThrCysTyrTyrProAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      197 -----ATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---SerGlnValProGluLeu
                                          548 ITCGIAACCAGAGITACCACACCAGCICAAAGGGGCAAGGICCCI 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              548 TICGIAACCAGAGIIACCACACCAGCICAAAGGGGCAAGGICCCI 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   771
55
23
73
73
54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-651-150B-1 (1-1911) x US-09-949-039-68 (1-771)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4, Application US/09982107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.27e-05
200.00
44.578
31.438
5.738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    134 ProSerAspThrHisVal-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerLeuGluVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT ORGANISM: Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                           RESULT 11
US-09-949-039-68
                                                                                                                                                                                                                                                                                                                                                                                                               US-09-949-039-68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
US-09-982-107-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                        LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \dot{\Omega}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q\bar{y}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏχ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                   Qγ
                                                                      TGTCCAATACCTGCTTCATGTGTTCTCAGAGCCCTCATCACTTCCCATGCCCCATCTCGA 1374
474
                                                                                                             490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80 TICTGGCTTTGGCCACTTTACTTCCTGCCAGTATCAGGGGCCCTGAGGATCCTCCCAGAA 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           248 GGTACCGIGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGTTACTCTG 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAGTGAC 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCCAGAAAGTC 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrGlySerTyrLysCysGlyLeuGly---ThrSerAsnArgGlyLeuSerPheAspVal 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAAAATGGTTTCATCTGCCCTATTTGTTCCAGATGCCTGCATATGCCAGTTCTTCCAAA 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    134 ProserAspThrHisVal-------TyrThrLysAspIleGly 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25
                                                                                             |||:::::|||:::
65 ThrThrLeuIleSerSerAsnGlyTyrLeuSerLysGluTyrSerGlyArgAlaAsnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PheThrLeuLeuValThrValPheSerGlyValSerThrLysSerProIlePheGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnGluValSerSerIleGluGlyAspSerValSerIleThrCysTyrTyrProAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---ATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCCTGAATGTCCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----SerGlnValProGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           140 GTAAAGGTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCTGAA---
                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: HIATT, ANDREW C.
APPLICANT: HIATT, ANDREW C.
APPLICANT: HED, MICH B.
TITLE OF INVENTION: METHODS FOR PRODUCING IMMUNOGLOBULINS CONTAINING
TITLE OF INVENTION: PROTECTION PROTEINS IN PLANTS AND THEIR USE
FILE REFERENCE: EP13002E
CURRENT APPLICATION NUMBER: US/09/982,107
CURRENT FILING DATE: 2001-10-16
NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 771
55
23
73
73
54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-651-150B-1 (1-1911) x US-09-982-107-8 (1-771)
                           roAsnLeuLysValProGlyAsnValThrAlaVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
                                                                                                                                                                                                                                                           Sequence 8, Application US/09982107
Patent No. US20020159958A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerLeuGluVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.27e-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               200.00
44.57%
31.43%
5.73%
                                                                                                         474 euGlyGluThrLeu--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                            1375 CT 1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ) ORGANISM: Mus sp. US-09-982-107-8
                                                                                                                                                                                 er 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 771
                                                                                                                                                                                                                                         US-09-982-107-8
                                                                    1315
                                                                                                                                                                                   490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188
                                   462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No.:
```

ŏλ g δž QYg Qγ g Qγ

g

QQ

QQ QΣ q à QQ

 Ω

```
214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96 IleAsnSerArgGlyLeuSerPheAspValSerLeuGluValSerGlnGlyProGlyLeu 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             116 LeuAsnAspThrLysValTyrThrValAspLeuGlyArgThr-----ValThrIleAsn 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |||||||
| 162 rGlyTyrValAsnProAsnTyrThrGlyArgIleArgLeuAspIleGlnGlyThrGlyGl 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         919
                                                                                                                                                                                                                                                                                                                                                                                                                                            CCAGTATCAGGGGCCCTGAGGATCCTCCCAGAAGTAAAGGTAGAGGGGGAGCTGGGCGGA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CIGIGCCGGGAGATGGCATCTGGAACATGTGGTACCGTGGTATCCACCACCAACTTC 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAAGGCAGAATACAAGGGCCGAGTTACTCTGAAGCAATACCCACGCAAGAATCTGTTC 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134 CysProPheLysThrGluAsnAlaGlnLysArgLysSerLeuTyrLys------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCAGTTACCATCAAATGCCCACTTCCT------GAAATGCATGTGGGGTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerValSerIleThrCysTyrTyrProProThrSerValAsnArgHisThrArgLysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValSerSerLysTyrAlaGlyArgAlaAsnLeuThrAsnPheProGluAsnGlyThrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CIAGIGGAGGIAACACAGCIGACAGAAAGIGACAGCGGAGICIAIGCCIGCGGAGCGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -------GACCGGGAAAGACCCAGAAAGTCACCCTGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCAAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           497 TITCAICIGCCCIAITIGIICCAGAIGCCIGCAIAIGCCAGIICTI---------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         543 -------CCAAATTCGTAACCAGAGTTACCACCAGCTCAAAGGGGCCAAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTCCAGT#CACCACTCCTCCCCCACCACCCAAATCACCCCACCGCCCTCGAG-----TG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182 nLeuLeuPheSerValValIleAsnGlnLeuArgLeuSerAspAlaGlyGlnTyrLeuCy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----CCAGAGCATCTTCAGTAGCAGGTGACAAGCCC
Patent No. US20020159958al

GENERAL INFORMATION:
APPLICANT: HIATY, ANDREW C.
APPLICANT: HIATY, ANDREW C.
APPLICANT: HEIN, MICH B.
TITLE OF INVENTION: METHODS FOR PRODUCING IMMUNOGLOBULINS CONTAINING
FILE REFERENCE: EP13002E
CURRENT APPLICATION OF PROTECTION PROTEINS IN PLANTS AND THEIR USE
CURRENT APPLICATION OF PROTECTION PROTEINS SOFTWARE: PAPELICATION NUMBER: US/09/982,107
CURRENT FILING DATE: 2001-10-16
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 4
LENGTH: 746
                                                                                                                                                                                                                                                                                                 746
1113
75
174
172
                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                         US-09-651-150B-1 (1-1911) x US-09-982-107-4 (1-746)
                                                                                                                                                                                                                                                                                             1.48e-05
199.00
35.218
21.168
5.70%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProllePheGly-----
                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens US-09-982-107-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGAACACA-
                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                                                                                                                                                                                                                                                                                                                                                                                                                           107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             437
                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                         δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Οý
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ÓΫ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ΩŸ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qγ
```

Ľ

```
APPLICANT: Chapin, Steven J.
APPLICANT: Richman-Eisenstat, Janice
APPLICANT: Rechman-Eisenstat, Janice
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Ligands Directed to the No. US20020102657Al-Secretory Componen
TITLE OF INVENTION: No. US20020102657Al-Stalk Region of pigk and Methods of Use T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCCGCGGGGTCGCCGCGACCGCGCTCCCAAAACAACATCTACAGCGCCCTGCCCGCGGGGC 1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ------GACGCTGCAGGCACAGGGGAG 1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---GCCATGATGGAGGACAGTGATTCAGAT 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTACATCAATGTTCCTGCCTGACAACTCCCCAGCTATCCCCCAACCCCAGGCTCGGAC 1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1283 TGTGGTGCCAAGGAGTCTCATCTATCTGCTGATGTCCAATACCTGCTTCATGTGTTCTCA 1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       376
                                                                                                                                                                                                                        282
                                                                                                                                                                                                                                                               883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         385 GlyTrpValLysAla------GlnTyrGluGlyArgLeuSerLeu 397
202 sGlnAlaGlyAspAspSerAsnSerAsnLysLysAsnAlaAspLeuGlnValLeuLysPr 222
                                                                                                            769
                                                                                                                                                                                    829
                                                                                                                                                                                                                                                                                                                                        916
                                                                                                                                                                                                                                                                                                                                                             916
                                                                                                                                                                                                                                                                                                                                                                                                                                          320 rolleGlnAlaTrpGlnLeuPheValAsnGluGluSer-----ThrIleProArgS 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuGluGluProGlyAsnGlyThrPheThrVallleLeuAsnGlnLeuThrSerArgAsp 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    erProThrValVal-LysGlyValAlaGlySerSerValAlaValLeuCysProTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             357 ArgLysGluSerLysSerIleLysTyrTrpCysLeuTrpGluGlyAlaGlnAsnGlyArg
                                                            -CAGCTACAACCACCACAGG
                                                                                                                                                                                                                262 spvalvalvalAsnThrLeuGlyLysArgAlaProAlaPheGluGlyArgIleLeuLeuA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1130 CCCTGGCTCCATGCCCCATCTCTGAAGACCAGCTGTGAATAC------GTGAGCCTC
                                     CGAACCTTCCTGCCATCCACTACAGCCTCAAAAATCTCAGCTCTGGAGGGGCTGCTCAAG
                                                                                                                                                 242 lyProGluValAlaAsnValAlaLySPheLeuCysArgGlnSerSerGlyGluAsnCysA
                                                                                                                                                                                      830 CACATCCTGATCCCGACCATCTGGGCCTTTTCCTGCTGGCACTTCTGGGGCTGGTGTG
                                                                                                                                                                                                                                                                                                snProGlnAspLysAsp----GlySerPheSerValValIleThrGlyLeuArgLysG
                                                                                                                                                                                                                                                                                                                                                                                                              CTCTCCAGGCGGGCCCGCCGACTGGCCGTGAGGATGCGCGCCCTGGAGGCTCCCAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ------CysProLeuLeuValAspSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           --Ly
                                                                                                                                                                                                                                                                                                                                        890 AA-----AAGGCCGTTGAAAGGAGAAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eLys------IleIleGluGlyGluProAsnLeuLysValProGlyAsnValTh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      418 AlaGlyPheTyrTrpCysLeuThrAsnGlyAspThrLeu-TrpArgThrThrValGluIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---LeuGlyGluThrLeu-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1343 GAGCCCTCATCACTTCCCATGCCCCATCTCGACT 1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTCGTGGAGCG-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4, Application US/09818247
Patent No. US20020102657A1
GENERAL INFORMATION:
APPLICANT: Mostov, Keith E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1181 TACCACCAGCCTGCC-
                                                                                                            CCCCAGACGCC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     453 rAlaval
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
US-09-818-247-4
                                                                                                                                                                                                                                                                                                                                                                                                              917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1223
                                                                                                            737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461
                                                                      du
                                                                                                                                           Db
                                                                                                                                                                                    QY
                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                                   Dp
                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QΫ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ДQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q_{Y}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                     Qγ
                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
```

```
319 ACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGCGGAGTCTA 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 439 CCACAGIGAATACGAGCCAICATGGGAAGAGCAGCCAAIGCCIGAGACICCAAAAIGGIT 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91 GCCACTITACTICCIGCCAGIAICAGGGGCCCIGAGGAICCICCCAGAAGTAAAGGIAGA 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        259 AICCACCACCAACTICATCAAGGCAGAATACAAGGGCCGAGTTACTCTGAAGCAATACCC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          108 rLysCysGlyLeuGly---ThrThrAsnArgGlyLeuPhePheAspValSerLeuGluVa 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----SerGlnValProGluPheProAsnAspTh 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31 TCTCTAGGGGCTCTTGGATGGACCTTGCACTCTAGAAGGGACAATGGACTTCTGGCTTTG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            379 IGCCIGCGGAGCGGCAIGAACACAGACCGGGAAAGACCCAGAAAGICACCCIGAAIGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68 eSerSerAsnGlyTyrLeuSerLysGluIyrSerGlyArgAlaSerLeuIleAsnPhePr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199 GCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGTGGTACCGTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 10, Application US/09982107
Patent No. US2002015958A1
GENERAL INFORMATION:
APPLICANT: HIATT, ANDREW C.
APPLICANT: HIATT, ANDREW C.
TITLE OF INVENTION: METHODS FOR PRODUCING IMMUNOGLOBULING TITLE OF INVENTION: PROTECTION PROTECINS IN PLANTS AND THEIR USE
                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: rat polymeric immunoglobulin receptor (plgR) US-09-818-247-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51 GGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCTGAA----
                                                                                                                                                                                                                                                                                                                                                                                      769
53
28
51
51
31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 SerLeuPheAlaLeuLeuValThrValPheSer----
                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-651-150B-1 (1-1911) x US-09-818-247-3 (1-769)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                             Matches:
                           CURRENT FILING DATE: 2001-03-26
PRIOR APPLICATION NUMBER: WO PCT/US01/09699
PRIOR FILING DATE: 2001-03-26
PRIOR APPLICATION NUMBER: US 60/192,197
PRIOR PLING DATE: 2000-03-27
PRIOR APPLICATION NUMBER: US 60/192,198
PRIOR PELING DATE: 2000-03-27
            CURRENT APPLICATION NUMBER: US/09/818,247
                                                                                                                                                                                                                                                                                                                                                                                      0.000116
                                                                                                                                                                                                                                                                                                                                                                                                         186.00
49.69%
32.52%
5.33%
                                                                                                                                                                  NUMBER OF SEQ ID NOS: 26
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |||:::
137 rHisVal 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                499 TCATCTG 505
                                                                                                                                                                                                                                                                   ORGANISM: Rattus sp
                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         127 1----
                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-982-107-10
                                                                                                                                                                                                                            LENGTH: 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      33
                                                                                                                                                                                                                                                   TYPE: PRI
                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                          ..
No.:
                                                                                                                                                                                                                                                                                                                                                                                                             Score:
                                                                                                                                                                                                                                                                                                                                                                                          Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΣ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ÓΣ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/09818247
Patent No. US20020102657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Chapin, Steven J.
APPLICANT: Richman-Eisenstat, Janice
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Ligands Directed to the No. US20020102657A1-Secretory Component,
TITLE OF INVENTION: No. US20020102657A1-Stalk Region of pigR and Methods of Use Ther
FILE REFERENCE: 18062E-000910US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            248 GGTACCGTGGTATCCACCACCACCTTCATCAAGGCAGAATACAAGGGCCGAGTTACTGTG 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGGTGACAGAAAGTGAC 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :::||||||
-----SerGlnValProGluLeu 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80 TICIGGCTITGGCCACTITACIICCTGCCAGTAICAGGGGCCCTGAGGAICCTCCCAGAA 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------ATGCATGTGAGGATATATCTGTGCCGGAGATGGCTGGATCTGGAACATGT 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85 IleAsnPheProGluAsnAsnThrPheValIleAsnIleGluGlnLeuThrGlnAspAsp 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCGGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCAGAAAGTC 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCCTGAATGTCCACAGTGAATACGAGCCATCATGGGAAGAGCGGCAATGCCTGAGACT 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerValAsnArgHisThrArgLysTyrTrpCysArgGlnGlyAla---SerGlyMetCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PheThrLeuLeuValThrValPheSerGlyValSerThrLysSerProllePheGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  140 GTAAAGGTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCTGAA---
                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: mouse polymeric immunoglobulin receptor (plgR)
                                                                                                                                                                                                                                                                                                                                                                                                           771
50
21
59
16
                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-651-150B-1 (1-1911) x US-09-818-247-4 (1-771)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches:
FILE REFERENCE: 18062E-000910US
CURRENT APPLICATION NUMBER: US/09/818,247
CURRENT FILING DATE: 2001-03-26
PRIOR APPLICATION NUMBER: W0 PCT/US01/09699
PRIOR FILING DATE: 2001-03-26
PRIOR FILING DATE: 2000-03-27
PRIOR FILING DATE: 2000-03-27
PRIOR FILING DATE: 2000-03-27
PRIOR APPLICATION NUMBER: US 60/192,197
PRIOR FILING DATE: 2000-03-27
PRIOR SEQ ILING DATE: 2000-03-27
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAAAAIGGITICAICIG 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134 ProSerAspThrHisVal 139
                                                                                                                                                                                                                                                                                                                                                                                                  2.04e-05
197.00
48.63%
34.25%
5.64%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerLeuGluVal-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity:
                                                                                                                                                                                                                                                                                    ORGANISM: Mus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                             LENGTH: 771
                                                                                                                                                                                                                                                                                                                                              US-09-818-247-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-818-247-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               197
                                                                                                                                                                                                                                                                   PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                           . No. .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q_{Y}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qγ
```

64

90

---GlyVal

258

68

88

```
91 GCCACTTTACTTCCTGCCAGTATCAGGGGCCCTGAGGATCCTCCCCAGAAGTAAAGGTAGA 150
                                                                                                                                                                                                                                                                                                                                                                                                                                         199 GCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGTGGTACCGTGGT 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259 ATCCACCACCAACTTCATCAAGGCAGAATACAAGGGCCGAGTTACTCTGAAGCAATACCC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                319 ACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGCGGAGTCTA 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 :::|||||| | |||| || 1|| || 1|| || 137
                                                                                                                                                                                                                                                                                                                                                                                         151 GGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCTGAA-----AT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     379 TGCCTGCGGAGCGGCATGAACACAGACCGGGGAAAGACCCAGAAAGTCACCCTGAATGT 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         439 CCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCAAAATGGTT 498
                                                                                                                                                                                                                                                                                17 SerThrGlnSerPro-----1lePheGlyProGlnAsp-ValSerSerIleGlu---- 32
                                                                                                                                                                                                                                                                                                                                                                                                        769
53
28
51
31
                                                                                                                                                                                       Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                       US-09-651-150B-1 (1-1911) x US-09-982-107-10 (1-769)
                                                                                                                                                                Length:
Matches:
; FILE REFERENCE: EPI3002E
; CURRENT APPLICATION NUMBER: US/09/982,107
; CURRENT FILING DATE: 2001-10-16
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 10
; LENGTH: 769
; TYPE: PRT
; ORGANISM: Rattus Sp.
US-09-982-107-10
                                                                                                                                                           0.000116
186.00
49.69%
32.52%
5.33%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            499 TCATCIG 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |||:::
| 137 rHisVal 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  127 1-----
                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                Alignment Scores:
Pred. No.:
                                                                                                                                                                             Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ^{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         рp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δλ
                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                    \Omega \underline{y}
                                                                                                                                                                                                                                                                                                                                                                                         QY
                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
```

Search completed: September 14, 2003, 04:22:31 Job time: 91.5 secs

Appli Appli

Sequence

Sequence Sequence

Sequence 18,

Seguence

Sequence Sequence

Sequence

Seguence

28836, 28001,

Sequence 47, Appl Sequence 41, Appl

Seguence:

Run on:

Searched:

```
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 20675, A
Sequence 31517, A
Sequence 19739, A
Sequence 18789, A
Sequence 16789, A
Sequence 16789, A
Sequence 16789, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 41, Appl
Sequence 3, Appli
Sequence 27068, A
Sequence 32064, A
Sequence 17501, A
Sequence 25638, A
                                                                                                                                                                                                                         Sequence 2
Sequence 2
Sequence 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: WILLY, SHUJIAN
APPLICANT: SWEET, RAYMOND
APPLICANT: TRUNET, ALEMSEGED
TITLE OF INVENTION: GENE SUPERFAMILY
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS: 9
ADDRESSEE: RAINER & PRESTIA
STREET: P.O. BOX 980
CITY: VALLEY FORGE
            US-09-312-155-10

US-09-312-155-10

US-09-312-155-16

US-09-266-225D-18

US-09-109-534-22

US-09-199-534-22

US-09-199-534-22

US-09-199-534-22

US-09-199-534-22

US-09-312-157-2

US-09-312-157-2

US-09-252-991A-28001

US-09-252-991A-28001

US-09-252-991A-21659

US-09-252-991A-31517

US-09-252-991A-31517

US-09-252-991A-16789

US-09-252-991A-16789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-252-991A-27068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-252-991A-30843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-252-991A-32064
US-09-252-991A-17501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-252-991A-25191
US-09-252-991A-25638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-483-533-41
US-09-283-471A-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA: PAPLICATION NUMBER: US/08/961,564A FILING DATE: 30-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT-US91-06532-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: PRESTIA, PAUL F
REGISTRATION NUMBER: 23,031
REFERENCE/DOCKET NUMBER: GH-70236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/056,935
FILING DATE: 25-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: PRESTIA, PAUL F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/08961564A Patent No. 6114515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-407-0700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
  COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1
US-08-961-564A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
148
147.5
146
146
146
146
146
146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              145
144.5
144
143.5
Command line parameters:

WODEL=frame+ n2p.model -DEV-x1h

O=Cogn2_1/CapPlo_spool/1059651150/runat_12092003_184343_9725/app_query.fasta_1.2055

O=Cogn2_1/CapPlo_spool/1059651150/runat_12092003_184343_9725/app_query.fasta_1.2055

-DB=ISSUE-GALSAA -OFMT=fastan -SUFFIX*=rai -MINMATCH=0.1 -LOOPCL=0

-LOOPEXT=0 -UNITS-bits -START=1 -END=-1 -MATRIX*=blosum62 -TRANS=human40.cdi

-LIST=45 -DOCALIGN=200 -THR_SCORE=pot -THR_MAX=100 -THR_MIN=0 -ALIGN=15

-MODE-LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINDEN=0 -ALIGN=15

-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG

-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6

-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Appli
Appli
Appli
Appli
Appli
Appli
Appli
Appli
Appli
                                                                                                                           September 14, 2003, 02:14:10; Search time 24 Seconds (without alignments) 6738.004 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                           1 aaaggagtaagcagcgtgtc......ttactctgtctccatccttt 1911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, A Sequence 3, A Sequence 12, Sequence 4, A Sequence 8, A Sequence 8, A Sequence 8, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2, P
Sequence 45,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Issued_Patents_AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
                                    Compugen Ltd
                                                                                           OM nucleic - protein search, using frame_plus_n2p model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-961-564A-2
US-09-050-861B-2
US-09-724-864-45
US-08-961-564A-4
US-09-050-861B-12
US-09-050-861B-12
US-09-095-385-4
US-09-312-157-8
            GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compug
                                                                                                                                                                                                                                                                                                                                                                                                                                                              hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                       328717 segs, 42310858 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                     0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                   , Ygapext
, Ygapext
, Fgapext
, Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0% Maximum Match 100%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                 US-09-651-150B-1
3490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match Length DB
                                                                                                                                                                                                                                                                                                               Xgapop 10.0 ,
Ygapop 10.0 ,
Fgapop 6.0 ,
Delop 6.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     390
107
107
73
608
771
771
746
                                                                                                                                                                                                                                                                                                BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                588.9

588.9

116.0

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.9

10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of
                                                                                                                                                                                                                                    Perfect score:
                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2047
1194.5
559
380
233
200
200
200
1999
187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
```

Database :

Result No.

854 261 914 281 301	Oy 1034 CGCCTCGTGGAGCGCACACACACACACACACCCCCCCCCC	54 AAGACCAGCTGTGAATACGTGAGCCTCTACC [DD 381 ASPSETASPASPIJILIEASHVALFLOALA 390 RESULT 2 US-09-050-861B-2 ; Sequence 2, Application US/09050861B ; Patent No. 6553314	; GENERAL INFORMATION: ; APPLICANT: PAYAN, Donald ; ITILE OF INVENTION: TOSO AS A TARGET FOR DRUG SCREENING ; FILE REFERENCE: RIGL-002CON ; CURRENT APPLICATION NUMBER: US/09/050,861B	CURRENT FILING DATE: 1998-03-30 PRIOR APPLICATION NUMBER: US/09/651,150B PRIOR FILING DATE: 2000-08-30 PRIOR APPLICATION NUMBER: US 09/050, 861	; PRIOR FILING DATE: 1998-03-30 ; NUMBER OF SEQ ID NOS: 35 ; SOFTWARE: PatentIn version 3.1	; SEQ 1D W 2 2 ; LEWGTH: 39 2 ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-050-861B-2	ignment Scores: 1.37e-167 Length: ore: 2047.00 Matches:	t Similarity: 99.74% Conservative: 0 coal Similarity: 99.74% Mismatches: 1 match: 0 match: 0 4 cas: 0	-09-651-150B-1 (1-1911) x US-09-050-861B-2 (1-390)	74	CCAGAAGINAAGGINGAAGGGGAACIGGGGGATCAGIIACCAILAAAIICCCACIICCI 13 	Oy 194 GAAAIGCATGAGGATATMICIGIGGGGGAGATGGCTGGAACAIGTGGTACC 253
EAX: 610-407-0701 EX: 846169 EX: 846169 ILION FOR SEQ ID NO: 2: NCE CHARACTERISTICS: TTH: 390 amino acid E: amino acid ANDEDNESS: single OLOGY: linear ULE TYPE: protein 564A-2 Scores:	2.3e-168 Length: 2056.00 Matches: 51milarity: 100.00% Mismatches h: 58.91% Indels: 3 Gaps:	US-09-651-150B-1 (1-1911) x US-08-961-564A-2 (1-390) OY	Db 1	Qy 254 GTGGTATCCACCACCACTTCATCAAGGCAAATACAAGGGCCGAGTTACTCTGAAGCAA 313	Qy 314 TACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGGCACAGAAAGTGACAGCGGG 373 	Qy 374 GTCTAIGCCTGCGGACCGGGCATGAACACAGACGGGGAAACACCCAGAAAGTCACCCTG 433 	Qy 434 AATGTCCACAGTGAATACGAGCCATCATGGGAAGGCAGCCAATGCCTGAGACTCCAAAA 493	OY 494 TGGTTTCATCTGCCCTATTGTTCCAGATGCCTGCATATGCCAGATTCTTA 553 141 TrpPheHisLeuProTyrLeuPheGlnMetProAlaTyrAlaSerSerSerLysPheWal 160	Qy 554 ACCAGAGTTACCACAGCGCCAAGGGCCAAGGTCCCTCCAGTTCACCACTCCTCCCCC 613	Qy 614 ACCACCAAATCACCCACCGCCTCGAGTGTCCAGAGCATCTTCAGTAGCAGGGACAAG 673	Qy 674 CCCCGAACCTTCCTGCCATCCACTACAGCCTCAAAAATCTCAGCTCTGGAGGGCTGCTC 733 Db 201 ProArgThrPheLeuProSerThrThrAlaSerLysIleSerAlaLeuGluGlyLeuLeu 220	Oy 734 AAGCCCCAGACGCCCAGCTACAACCACCACAGCTGCACAGGCAGAGAGCACTGGAC 793	Qy 794 TATGGCTCACAGTCTGGGAGGAAGGCCAAGGATTTCACATCCTGATCCCGACCATCCTG 853

~

		33333311111111111111111111111111111111	433 ;	A 493	V 553 US-	1 160	160 613 180	1 160 3 673 5 200	160 613 1180 673 200 733	1 160 1 180 1 180 2 673 5 200 1 220 1 220 2 793	1 160 1 180 1 180 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	160 613 180 673 200 733 240 793 240 853 260	1 160 6 133 6 673 8 200 1 220 1 260 1 260 1 3 973	1 160 5 613 5 613 5 673 6 720 7 733 7 793 7 200 8 520 8 53 9 73 1 250 1 25	160 613 180 673 200 733 220 793 280 913 280 973 300 1033 320	1 160 1 160 1 180 1 200 1 220 2 40 2 240 2 280 3 973 1 1093 1 1093	160 613 180 673 200 733 220 793 240 853 260 973 300 1033 320 1093 340 1153 360	160 613 180 673 200 733 220 793 240 973 300 1033 320 1153 380
61 81 81 81 81 81 81 81 81 81 8	llill	4 T	4 -	₩ -	4 4	4 H	4 - T	74 CCCGAACCTTCCTGCCATCCACTACA(4 AAGCCCCÄ [[[[[]]]] 1 LysProGl	7 7	4 ⊢	914 GCCCTCTCCAGGCGGGCCCGCCGACTG(974 AGGCCCGCGGGTCGCCGCGACCGCC3	034 CGCGCTCGTGGAGCGGACGCTGCAGGCP 	4 CCGTIGCCCCCCCCCCCCCGCTGCAGGTGTCTGAATCTCCCTGGCTCCATGCCC	4 AAGACCAGCTGTGAATACGTGAGCCTCT 	4 GATTCAGATGACTACATCAATGTTCCTGCC	64-45

Sequence 45, Application US/09724864 Patent No. 6380362 GENERAL INFORMATION: APPLICANT: Watson, James D

535 134 CCAGAAGTAAAGGTAGAGGGGGGGGCGGATCAGTTACCATCAAAIGCCCACTTCCT 193 194 GAAATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGTGGTACC 253 314 TACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGGGGA 373 374 GICTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCAGAAAGTCACCCTG 433 434 AATGICCACAGIGAATAC---GAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCA 490 120 AsnValHisAsnGluTyrProGluProPheTrpGluAspGluTrpThrSerGluArgPro 139 254 GIGGIAICCACCACCAACTICAICAAGGCAGAATACAAGGGCCGAGTIACICTGAAGCAA 313 536 AGTICTICCAAAITCGTAACCAGAGTIACCACCAGCICAAAGGGGGCAAGGICCCICCA 595 656 TCAGTAGCAGGTGACAAGCCCCGAACCTTCCTGCCATCCACTACAGCCTCAAAAATCTCA 715 219 716 GCTCTGGAGGGCTGCTCAAGCCCCAGACGCCCAGCTACAACCACCACCAGGCTGCAC 775 61 ValValSerAsnThr---PheValLysLysGluTyrGluArgArgValThrLeuThrPro 79 21 ProGluValGlnLeuAsnValGluTrpGlyGlySerIleIleIleGluCysProLeuPro 40 66 80 CysLeuAspLysLysLeuPheLeuValGluMetThrGlnLeuThrGluAsnAspAspGly 596 GITCACCACTCCTCCCCCACCACCAAATCACCCACCGCCCTCGAGTGTCCAGAGCATCT LICANT: Murison, James G.

LECANT: Murison, James G.

LE OF INVENTION: Polynucleotides, polypeptides expressed

LE OF INVENTION: Polynucleotides and methods for their use.

LE OF INVENTION: Dy the polynucleotides and methods for their use.

REFERENCE: 11000.105001

RENT APPLICATION NUMBER: U.S. No. 6380362 60/171,678

RELING DATE: 1999-11-28

RELING DATE: 1999-12-23

BER OF SEQ ID NOS: 72

FURMEE: FastSEQ for Windows Version 4.0 422 243 46 113 21 491 AAAIGGTTTCATCTGCCCTATTTGTTCCAGAIGCCT----Conservative: Mismatches: 51-150B-1 (1-1911) x US-09-724-864-45 (1-422) Matches: Indels: 2.41e-94 1194.50 68.32% 57.45% 34.23% : Similarity: ocal Similarity: ANISM: Mouse ID NO 45 NGTH: 422 PE: PRT nt Scores: 24-864-45 Q $Q_{\overline{Y}}$

qq Ω g QΥ g Ω

```
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                   TELEPHONE:
TELEFAX: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-050-861B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARL.
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JS-09-050-861B-3
                                                                                                                                                                                                                                      US-08-961-564A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ^{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QY
                                                                                                                                                                                                                                                                                                               1039
                                                                                                                                                                                                                                                                                                                                                                                    1040 CGTGGAGCGGACGCTGCAGGCACAGGGGCCCCCGTTCCCGGCCCCCGGAGCGCCCTTG 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1220 GATGACTACATCATCTTCCT---GCCTGACAACTCCCCAGCTATCCCCCAACCCCAGGC 1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1100 CCCCCCCCCCCCCCCCGCTGCTGTCTCAATCTCCCTGGCTCCATGCCCCATCTCTGAAGACC 1159
                                                                                                                                                                                                                                                               338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 379 SerCysGluTyrValSerLeuGlyTyrGlnProAlaValAsnLeuGluAspProAspSer 398
                                          239 GluGlnArgThrArgHisHisGlyProHisTyrGlyArgGluAspArgGlyLeuHisIle 258
                                                                                                                                                                                                     279 LeuGlyLeuValValLysArgAlaIleGlnArgArgArgArgAlaSerSerArgArgAlaGly 298
                                                                                                                                                                                                                                                                                                                                    875 CTGGGGCTGGTGGTGAAAAGGGCCGTTGAAAGGAGGAAAGCCCTCTCCAGGCGGGCCCGC
                                                                                                                                                                                                                                        CGACTGGCCGTGAGGATGCGCGCCCTGGAGGCTCC---------CAGAGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                           AGCTGTGAATACGTGAGCCTCTACCACCAGCCTGCCGCCATGATGGAGGACAGTGATTCA
                                                                                          --TITCACATCCIGATCCCGACCATCCTGGGCCTTTTCCTGCTGCTGCACTT
                                                                                                                                                                                                                                                                                                                 980 GECGEGICGCCGCGACCGCGCTCCCAAAACAACAICTACAGCGCCTGCCCGCGCGCGCGCCT
                   APPLICANT: TRUNEH, ALEMSEGED
TITLE OF INVENTION: PIGRL-1, A MEMBER OF IMMUNOGLOBULIN
TITLE OF INVENTION: GENE SUPERFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FASTEM: DOS
FASTSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 536
TOR APPLICATION: 536
TOR APPLICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/056,935
FILING DATE: 25-AUG-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/08961564A Patent No. 6114515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: RATHER 6 PRESTIA
STREET: P.O. BOX 980
CITY: VALLEY FORGE
STATE: PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: WU', SHUJIAN
APPLICANT: SWEET, RAYMOND
APPLICANT: TRUNEH, ALEMSEGED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRESTIA, PAUL F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1277 TCGGACTGT 1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerSerCys 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-961-564A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 4
```

g

g $^{\circ}$ q QY g ò qq οy P

ά

ò

```
81 TyrProArgLysAsnLeuPheLeuValGluValThrGlnLeuThrGlnSerAspSerGly 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314 TACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGCGGA 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            194 GAAATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGTGGTACC 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGTATCCACCACCTTCATCAAGGCAGAATACAAGGCCCGAGTTACTCTGAAGCAA 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 ProGluValLysValGluGlyGluLeuGlyGlySerValThrIleLysCysProLeuPro 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74 AIGGACTICIGGCITIGGCCACTITACTICCTGCCAGIATCAGGGGCCCTGAGGATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134 CCAGAAGTAAAGGTAGAGGGGGGGCTGGGCGGATCAGTTACCATCAAATGCCCACTICCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: PAYAN, Donald
TITLE OF INVENTION: 100S AS TARGET FOR DRUG SCREENING
FILE REPERENCE: RIGH-002CON
CURRENT APPLICATION NUMBER: US/09/651,150B
PRIOR PILLING DATE: 1998-03-30
PRIOR PILLING DATE: 1998-03-30
SPRIOR FILLING DATE: 1998-03-30
SUMMER OF SEQ ID NOS: 35
SOFTWARE: PATENTIN VERSION 3.1
                                                                                                                                                                                                                                                                                                                                 107
105
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73
                                                                                                                                                                                                                                                                                                                                                                       Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-651-150B-1 (1-1911) x US-08-961-564A-4 (1-107)
                                                                                                                                                                                                                                                                                                                                                            Matches:
                                                                                                                                                                                                                                                                                                                                      Length:
                 GH-70236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application US/09050861B Patent No. 6555314
23,031
                 REFERENCE/DOCKET NUMBER: GH
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCTATGCCTGCGGA 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101 ValTyrAlaCysGly 105
                                                                                                                                                                                                                                                                                                                                      5.38e-40
                                                                                                                                                                                                                                                                                                                                                       559.00
100.00%
100.00%
16.02%
                                                                                                                                                                LENGTH: 107 amino acids TYPE: amino acid STRANDEDNESS: single TOPCIOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.1e-24
                                                           : 610-407-0700
610-407-0701
                                                                                                 TELEX: 846169
INFORMATION FOR SEQ ID NO:
                                                                                                                                               SEQUENCE CHARACTERISTICS
```

us-09-651-150b-1.rai

```
STRANDEDNESS
                                                                                                                                                    90025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΫ́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΫ́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÿ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1031 CGGCGCCTCGTGGAGCGGACGCTGCAGGCACAGGGGGAGGCCCCCCTTCCCGGCCCCGGA 1090
                                                                                             170 GTTACCATCAAATGCCCACTTCCTGAAATGCATGTGAGGATATATCTGTGCCGGGAGATG 229
                                                                                                                                           230 GCTGGATCTGGAACATGTGGTACCGTGGTATCCACCAACTTCATCAAGGCAGAATAC 289
                                                                                                                                                                                            290 AAGGGCCGAGTTACTCTGAAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACA 349
                                                                                                           09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 12, Application US/09050861B

Fatent No. 655514

GENERAL INFORMATION:

APPLICANT: PAYAN, DOALD

TITLE OF INVENTION: TOSO AS A TARGET FOR DRUG SCREENING

FILE REFERENCE: RIGL-002CON

CURRENT FILING DATE: 1998-03-30

PRIOR APPLICATION NUMBER: US/09/651,150B

PRIOR FILING DATE: 1998-03-30

PRIOR FILING DATE: 1998-03-30

PRIOR FILING DATE: 1998-03-30

PRIOR FILING DATE: 1998-03-30

SRIOR FILING DATE: 1998-03-30

SOFTWARE: PARCH FILING DATE: 1998-03-30

SOFTWARE: PARCH FILING DATE: 1998-03-30
                                                                                                                                                                                                                                           350 CAGCTGACAGAAAGTGACAGCGGAGTCTATGCCTGCGGA 388
   72
1
0
0
                                                                                                                                                                                                                                                         4 4 3
0 0 0 0
0 0 0
              Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-651-150B-1 (1-1911) x US-09-050-861B-12 (1-43)
                                                                   US-09-651-150B-1 (1-1911) x US-09-050-861B-3 (1-73)
                          Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches:
                                      Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/09095385
Patent No. 6300104
380.00
100.00%
98.63%
10.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.75e-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        233.00
100.00%
100.00%
6.68%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1091 GCGCCGTTG 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaProLeu 43
          Similarity:
cal Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                       US-09-050-861B-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-050-861B-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-095-385-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 43
                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
          Percent Sim
Best Local
                                                                                              ōλ
                                                                                                                    a
                                                                                                                                            δλ
                                                                                                                                                                  q
                                                                                                                                                                                            δ
                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                           ōλ
                                                                                                                                                                                                                                                                 QC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ΩD
```

```
79 CTTCIGGCTTIGGCCACTTTACTICCTGCCAGTATCAGGGGCCCTGAGGATCCTCCCAGA 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----GAAATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATG 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247 IGGTACCGIGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGTTACTCT 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              307 GAAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGGTGACAGAAAGTGA 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25 oGluGluValAsnSerValGluGlyAsnSerValSerIleThrCysTyrTyrProProTh 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 64 slleThrLeulleSerSerGluGlyTyrValSerSerLysTyrAlaGlyArgAlaAsnLe 84
APPLICANT: Mortison, Sherie L.
APPLICANT: Chintalacharuvu, Kote R.
TITLE OF INVENTION: SECRETORY IMMUNOGLOBULIN PRODUCED
TITLE OF INVENTION: BY SINGLE CELLS AND METHODS FOR MAKING AND USING
THILE OF INVENTION: SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       45 rSerValAsnArgHisThrArgLysTyrTrpCysArgGlnGlyAlaArgGlyGly---Cy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             139 AGTAAAGGTAGAGGGGGAGCTGGGGGGATCAGTTACCATCAAATGCCCACTTCCT-
                                                                                                                                              E: Merchant, Gould, Smith, Edell, Welter & Schmidt 11150 Santa Monica Boulevard, Suite 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 608
1115
76
1167
1167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  367 CAGCGGAGICIAIGCCIGCGGAGCGGGCAIGAACACA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-651-150B-1 (1-1911) x US-09-095-385-4 (1-608)
                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastED. COURREMY APPLICATION DATA:
APPLICATION NUMBER: US/09/095,385
FILING DATE: 09-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30435.45USUI
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/050,969
FILING DATE: 19-JUN-1997
ATTORNEY,AGENT INFORMATION:
NAME: Canady, Karen S
                                                                                                                                           ADDRESSEE: Merchant, Gould, STREET: 11150 Santa Monica B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            39,927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 310 445-1140
TELEFAX: 310 445-9031
                                                                                                                                                                                                                                                                                                               IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 608 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200.00
35.11%
21.14%
5.73%
                                                                                                                                                                                                                                                                                          Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Canady, Karen S
REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ' MOLECULE TYPE: protein US-09-095-385-4
                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                    CITY: Los Angeles
STATE: CA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                           COMPUTER: IBM CON OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
```

-- 403

Db 426 lileLeuAsnGlnLeuThrSerArgAspAlaGlyPheTyrTrpCysLeuThrAsnGlyAs 446 Oy 1196 -GCCATGATGGAGGACAGTGATTCAGATGATCCTGCCTGACAACTCC 1254 :::: ::::::: Db 446 pThrLeu-TrpArgThrThrValGluIleLysIlelleGluGlyGluP 462 1255 CAGCTATCCCCAACCCCAGGTTGGTGGCCAAGAGTTCTGTTGTTGTGTGT 1314 Oy 1255 CAGCTATCCCCAACCCCAGGTTGTGGTGCCAAGAGTTCTATCTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT	OY 1375 CT 1376 Db 490 er 490 RESULT 8	US-08-44-000A-8 Sequence 8, Application US/08434000A Patent No. 6046037 GENERAL INFORMATION: APPLICANT: ANDREW C. HIATT, JULIAN APPLICANT: KC. MA, THOMAS LEHNER TITLE OF INVENTION: IMMUNOCLOBULINS CONTAINING PROTECTION TITLE OF INVENTION: PROPERTS IN PLANTS AND THEIR USES	19 3: Lyon Ifth Stre	; STREET: Suite 4/00 ; CITY: Los Angeles ; STATE: California ; COUNTRY: U.S.A.	071 EAD YPE	ER: IBM Compat ING SYSTEM: IB RE: Word Perfe APPLICATION DAT	JS/08/434,0C	; PRIOR APPLICATION DATA: including application ; PRIOR APPLICATION DATA: described below: ; APPLICATION NUMBER: 08/367,395 ; FILING DATE: 12/30/94	; ATTORNEY/AGENT INFORMATION: ; NAME: Gilse, Jeffrey W. ; REGISTRATION NUMBER: 34,613 ; REFERENCE/DOCKET NUMBER: 212/127	; TELECOMMUNICATION INFORMATION: ; TELEPHONE: (619) 552-8400 ; TELEFAX: (619) 552-0159 ; TELEFX: 67-3510	7	A C C V	000A-8 Scores:	
	gLysSerLeuTyrLys	562 TACCACACCAGCTCAAAGGGCCAAGGTCCCTCCAGTTCACCACCTCCCCCACCACCA 621 1.	649 AGCATCTTCAGTAGCAGGTGACAAGCCCCGAACCTTCCTGCCATCCACTACAGCCTCAAA 708 	709 AATCTCAGCTCTGGAGGGCTGCTCAAGCCCCAGACGCC	748CAGCIACAACCACCACCAGGCTGCACAGGAGAGCACTGGACTATGGCTC 801 	802 ACAGTCTGGGAGGGAAGGCCAAGGATTTCACATCCTGAICCCGACCATCCTGGGCCTTTT 861 :::	862 CCTGCTGGCACTTCTGGGCTGGTGAA	892AAGGCCGTGAAAGGAAGAAAGCCTCTCCAAGGCGGCCCGCCGCTGAG 948 	949 GATGCGCCCTGGAGAGCTCCCAGAGGCCCCGCGGGTCGCCGCGCGCG	1009 CAACATCTACAGCGCCTGCCCGGGGGGGGGGGGGGGGGG	1049GACGCTGCAGGCACACAGGGAGCCCCCGTTCCCGGCCCCGGAGCGCCCGTTGCC 1101 :::	1102 CCCGCCCCCTGCAGTGTGTGAATGTCCCTGGCTCCCATGTCTGAAGACCAG 1161	1162 CTGTGAATACGTGAGCCTCTACCACCAGCCTGCC	20 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -

us-09-651-150b-1.rai

~

```
SEQUENCE LISTING
                                                                                                                                                                                 LENGTH: 771 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4, Application US/08434000A Patent No. 6046037
             INFORMATION:
                                                                                                                                                                                                                                                 DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             134 ProSerAspThrHisVal----
                                                                                                                                                  INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             124 SerLeuGluVal-----
                                                                                                                                                                                                                                                                                                                       8.28e-09
200.00
44.57%
31.43%
5.73%
                                                                                                                                                                                                                                TOPOLOGY: linear
             ATTORNEY/AGENT
                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-434-000A-4
                                                                                                                                                                                                                                                                             US-09-312-157-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  368
                                                                                                                                                                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                           Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ōλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŏλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                           80 IICIGGCITIGGCCACTTTACTTCCIGCCAGIAICAGGGGCCCTGAGGATCCTCCCAGAA 139
                                                                                                                                                      140 GIAAAGGIAGAGGGGAGCIGGGCGGATCAGIIACCAICAAAIGCCCCACIICCIGAA--- 196
                                                                                                                                                                                                                     ------ATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGT 247
                                                                                                                                                                                                                                                                                GGTACCGIGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGITACTCIG 307
                                                                                                                                                                                                                                                                                                                                              AAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGAC 367
                                                                                                                                                                                                                                                                                                                                                                  85 IleAsnPheProGluAsnAsnThrPheValIleAsnIleGluGlnLeuThrGlnAspAsp 104
                                                                                                                                                                                                                                                                                                                                                                                                         AGCGGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCAGAAAGTC 427
                                                                                                                                                                                                                                                                                                                                                                                                                                     105 ThrGlySerTyrLysCysGlyLeuGly---ThrSerAsnArgGlyLeuSerPheAspVal 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        428 ACCCTGAATGTCCACAGTGAATACGAGCCATCATGGGAAGGAGCAGCCAAATGCCTGAGACT 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAAAAIGGITICAICIGCCCFAITIGIICCAGAIGCCIGCAIAIGCCAGITCIICCAAA 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----TyrThrLysAspileGly 145
                                                                                                                         6 PheThrLeuLeuValThrValPheSerGlyValSerThrLysSerProilePheGlyPro 25
                                                                                                                                                                                      GlnGluValSerSerIleGluGlyAspSerValSerIleThrCysTyrIyrProAspThr 45
                                                                                                                                                                                                                                                  SerValAsnArgHisThrArgLySTyrTrpCysArgGlnGlyAla---SerGlyMetCys 64
                                                                                                                                                                                                                                                                                                       ----SerGlnValProGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: IMMUNOGLOBULINS CONTAINING PROTECTION PROTEINS IN PLANTS AND THEIR USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      146 ArgAsnValThrIleGluCysProPheLysArgGluAsnValPro 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               548 TTCGTAACCAGAGTTACCACCAGCTCAAAGGGGCAAGGTCCCT
        73
                                                           US-09-651-150B-1 (1-1911) x US-08-434-000A-8 (1-771)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerLeuGluVal------
    Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/312,157
FILING DATE: 14-May-1999
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/434,000
FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: ANDREW C. HIATT, JULIAN K.-C. MA, THOMAS LEHNER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 90071
TER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C.
SOFTWARE: Word Perfect 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8, Application US/09312157
Patent No. 6303341
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProSerAspThrHisVal----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth
Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
 31.43% 5.73%
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-312-157-8
                                                                                                                                                                                      56
                                                                                                                                                                                                                     197
                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                           368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  134
                                                                                                                                                                                                                                                                                                                                              308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124
                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
                                                                                           Qγ
                                                                                                                       Q
                                                                                                                                                        δλ
                                                                                                                                                                                    qq
                                                                                                                                                                                                                   òγ
                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ρp
                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                             \Omega
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                           QY
                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \delta \lambda
```

```
80 IICTGGCITTGGCCACTTTACTTCCTGCCAGTATCAGGGGCCCTGAGGATCCTCCCAGAA 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           140 GTAAAGGTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCTGAA--- 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 248 GGIACCGTGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGTTACTCTG 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            308 AAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGAC 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCCAGAAAGTC 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     428 ACCCTGAATGTCCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACT 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                488 CCAAAAIGGTITCAICIGCCCIAITIGIICCAGAIGCCIGCAIAIGCCAGIICIICCAAA 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----TyrThrLysAspileGly 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 PheThrLeuLeuValThrValPheSerGlyValSerThrLysSerProllePheGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26 GlnGluValSerSerIleGluClyAspSerValSerIleThrCysTyrTyrProAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerValAsnArgHisThrArgLysTyrTrpCysArgGLnGlyAla---SerGlyMetCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   197 -----AIGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --SerGlnValProGluLeu
                                                                                                                                                                                                                                                                                                                                         Mouse Polyimmunoglobulin Receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Satent No. DUMBON.:
GENERAL INFORMATION:
APPLICANT: ANDREW C. HIATT, JULIAN
APPLICANT: K.-C. MA, THOMAS LEHNER
APPLICANT: K.-C. MA, THOMAS LEHNER
TOTAL TAVENTION: IMMUNOGLOBULINS CONTAINING PROTECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          146 ArgAsnValThrIleGluCysProPheLysArgGluAsnValPro 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             548 TTCGTAACCAGAGTTACCACCAGCTCAAAGGGGCAAGGTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                        771
55
23
73
73
54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-651-150B-1 (1-1911) x US-09-312-157-8 (1-771)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches:
NAME: Guise, Jeffrey W.
REGISTRATION NUMBER: 34,613
REFERENDE/DOCKET NUMBER: 212/127
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 552-8400
TELEFAX: (619) 552-0159
TELEX: 67-351
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
                                                                                                                                                                                                                                                                                                                                                           SEQUENCE DESCRIPTION: SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
```

```
1130 CCCTGGCTCCATGCCCCCATCTCTGAAGACCAGCTGTGAATAC------GTGAGCCTC 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---GCCATGATGGAGGACAGTGATTCAGAT 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -------GACGCIGCAGGCACAGGGGAG 1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 398 LeuGluGluProGlyAsnGlyThrPheThrValIleLeuAsnGlnLeuThrSerArgAsp 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ArglyscluserlysserllelysTyrTrpCysLeuTrpGluGlyAlaGlnAsnGlyArg 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----CysProLeuLeuValAspSerGlu 384
                     :::|||:::
96 IleAsnSerArgGlyLeuSerPheAspValSerLeuGluValSerGlnGlyProGlyLeu 115
                                                                                                                         496
                                                                                                                                                                                                                      150 ------GlnIleGlyLeuTyr-ProValLeuValIleAspSerSe 162
                                                                                                                                                                                                                                                     543 -------CCAAATTCGTAACCAGAGTTACCACACCAGCTCAAAGGGGCAAGGTC 589
                                                                                                                                                                                                                                                                                162 rGlyTyrValAsnProAsnTyrThrGlyArglleArgLeuAspIleGlnGlyThrGlyGl 182
                                                                                                                                                                                                                                                                                                                                                  182 nLeuLeuPheSerValValIleAsnGlnLeuArgLeuSerAspAlaGlyGlnTyrLeuCy 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAACCITCCTGCCATCCACTACAGCCTCAAAAATCTCAGCTCTGGAGGGGCTGCTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       644 T-----CCAGAGCATCTTCAGTAGCAGGTGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          222 oGluProGlu-LeuValTyrGluAspLeuArgGlySerValThrPheHisCysAlaLeuG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----CAGCTACACCACCACCACCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               242 lyProGluValAlaAsnValAlaLysPheLeuCysArgGlnSerSerGlyGluAsnCysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 830 CACATCCTGATCCCGACCATCCTGGGCCTTTTCCTGCTGGCACTTCTGGGGCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CICICCAGGGGCCCGGCCGACTGGCCGTGAGGATGCGCGCCCTGGAGAGCTCCCAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          320 rolleGlnAlaTrpGlnLeuPheValAsnGluGluSer-----ThrlleProArgS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       202 sGlnAlaGlyAspAspSerAsnSerAsnLysLysAsnAlaAspLeuGlnValLeuLysPr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           --------AAGGCCGTTGAAAGGAAAACC
                                                                                                                         GTCCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCAAAATGG
                                                           -GACCGGGGAAAGACCCAGAAAGTCACCCTGAAT
                                                                                                                                                   CysprophelysthrGluAsnAlaGlnLysArglysSerLeuTyrLys-------
                                                                                                                                                                                                                                                                                                                     TTTCATCTGCCCTATTTGTTCCAGATGCCTGCATATGCCAGTTCTT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       385 GlyTrpValLysAla-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          L037 GCTCGTGGAGCG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    737 CCCCAGACGCC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  890 AA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1181 TACCACCAGCCTGCC-
395 ATGAACACA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            357
                                                                                                                                                                                                                                                                                                                                                                                                                                                      677
                                                                                                                             437
                                                                                                                                                               134
                                                                404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             αq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ^{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        οy
                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                            QY
                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                     οgα
                                                                                                                                                                                                                                                                                                                                                                                         QY
                                                                                                                                                                                                                                                                                                                                                                                                                       OP
                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                              qq
                                                                QΣ
                                                                                             du
                                                                                                                              QΥ
                                                                                                                                                             q
                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          275 ATCAAGGCAGAATACAAGGGCCGAGTTACTCTGAAGCAATACCCACGCAAGAATCTGTTC 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             215 CTGTGCCGGGAGATGGCTGGAACATGTGGTACCGTGGTATCCACCACCACTTC 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGCGGAGTCTATGCCTGCGGAGCGGGC 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||||||||::: ||| ||| ||| ||| |||:::::|||:::
37 TrpCysArgGlnGlyAlaArgGlyGly---CysIleThrLeuIleSerSerGluGlyTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---GAAATGCATGTGAGGATATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human Polyimmunoglbulin Receptor
 IIILE OF INVENTION: PROTEINS IN PLANTS AND THEIR USES
                                                                                                                                                                                                                                                                                          FILING DATE:
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
FILING DATE:
NAME: Guise, Jeffrey W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-651-150B-1 (1-1911) x US-08-434-000A-4 (1-746)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                167 TCAGTTACCATCAAATGCCCACTTCCT----
                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                            COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: WORT PETFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/434,000A
                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 212/127
TELECOMUNICATION INFORMATION:
TELEPHONE: (619) 552-8400
TELEFAX: (619) 552-0159
                                                  ADDRESSEE: Lyon & Lyon SIREET: 633 West Fifth Street STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Guise, Jeffrey W. REGISTRATION NUMBER: 34,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: SEQUENCE LISTING INFORMATION FOR SEQ ID NO: 4: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9.96e-09
199.00
35.21%
21.16%
5.70%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGIH: 746 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          single
                    NUMBER OF SEQUENCES: 1 CORRESPONDENCE ADDRESS:
                                                                                  STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 67-3510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                 90071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-434-000A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΣ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QY
```

282

919

736

x US-09-312-1 GCCCTGAGGATCC	Db 3 ProllePheGly	Qy 167 TCAGTTACCATCAAATGCCCACTTCCTGAAATGCATGTGAGGATATAT 214	Qy 215 CIGIGCGGGGAGAIGGCTGGAACAIGTGCTACCGIGGTATCCACCACTTC 274	ATCAAGGCAGAATACAAGGGCCGAGTTACTCTGAAGCAATACCCACGCAAGAATCTGTTC	56 ValSerSerLysTyrAlaGlyArgAlaAsnLeuThrAsnPheProGluAsnGlyThrPhe	y 335 CIAGIGGAGGTACKGGCTGACKGAAAGTGACAGGGGGTCTATGCCTGCGGGGGGGG 394 11		Db 96 IleAsnSerArgGlyLeuSerPheAspValSerLeuGluValSerGlnGlyProGlyLeu 115	404	Db 116 LeuAsnAspThrLysValTyrThrValAspLeuGlyArgThrValThrIleAsn 133		134	OY 497 TITCAICTECCCTAITHETICCAGAIGCCTGCATATGCCAGTTCTT 542 Db 150	cantreary reary 1 - F10ValleaValleASpSerSe			 yrLeuCy	Qy 644 T	Db 202 sGlnAlaGlyAspAspSerAsnSerAsnLysLysAsnAlaAspLeuGlnValLeuLysPr 222	677	Db 222 oGluProGlu-LeuValTyrGluAspLeuArgGlySerValThrPheHisCysAlaLeuG 242	737	Db 242 lyProGluValAlaAsnValAlaLySPheLeuCysArgGlnSerSerGlyGluAsnCysA 262	OY 770 CTGCACAGGCAGAGACCACTGGACTATGGCTCACAGTCTGGGAGGGA	Db 262 spValValValAsnThrLeuGlyLysArgAlaProAlaPheGluGlyArgIleLeuLeuA 282	QY 830 CACATCCTGACCCACCATCCTGGGCCTTTTCCTGCTGGCACTTCTGGGGCTGGTG 889	Db 282 snProGlnAspLysAspGlySerPheSerValVallleThrGlyLeuArgLysG 300	QY 890 AA	Db 300 luAspAlaGlyArgTyrLeuCysGlyAlaHisSerAspGlyGlnLeuGlnGluGlySerP 320	CGCCCTGG	
bb 418 AladlyPhcTyrTrpCysLeuThrAsnGlyAspThrLeu-TrpArgThrThrValGluI1 437 Qy 1223 GACTACATCAATGIICCTGCCTGACAACTCCCCAACCCCAACCCCAAGGGTTCGAC 1282	nValTh	QY 1283 TGTGGTGCCAAGGAGTCTCATCTACTGCTGATGTCCAATACCTGCTTCATGTGTTCTCA 1342			<pre>; Sequence 4, Application US/09312157 ; Patent No. 6303341</pre>	<u>ы</u> .	OF 1	CORRESPONDENCE ADDRESS:	ADDRESSEE: Lyon & Lyon STREET: 63 West Fifth Street Smite 4700	CITY: Los Angeles	COUNTRY: U.S.A.	COMPUTER READABLE FORM: MEDIUM TYPE: 3.5" Diskette 1 AA Wh	age patible	OPERATING SYSTEM: IBM P.C. DOS 5.0 SOFTWARE: Word Perfect 5.1	CURRENT APPLICATION DATA: APPLICATION NUMBER: 14-May-1909	CLASSIFICATION: CURNOWN> PRIOR APPLICATION DATA:	; APPLICATION NUMBER: 08/434,000 ; FILING DATE: <unknown></unknown>	ATTORNEY/AGENT INFORMATION: NAME: Guise, Jeffrey W.	REGISTRATION NUMBER: 34,613 REFERENCE/DOCKET NUMBER: 212/127	TELECOMMUNICATION INFORMATION: TELEPHONE: (619) 552-8400	: TELEX: (0.15) 332 0133	: INFORMATION FOR SEQ ID NO: 4: SEQUENCE CRARACTERISTICS: SEQUENCE CRARACTERISTICS:	LENGTH: 746 amino acids		DESCRIPTION: Hu	; SEQUENCE DESCRIPTION: SEQ ID NO: 4 US-09-312-157-4	ment Scores:	9.96e-09 199.00 Similaritus	vative: ches:	5./U% Indels: 4 Gaps:	

```
TELEFAX:
                                                               LENGTH:
                                                                                                                                                                                              Мо..
                                                                                                                                                                                                             Score:
                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                    δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \overline{O}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                         1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1283 IGTGGTGCCAAGGAGTCTCATCTATCTGCTGATGTCCAATACCTGCTTCATGTGTTCTCA 1342
                                                                                 1069
                                                                                                                                               1180
                                                                                                                                                                                                                                                                                                                                     ------GCCATGATGGAGGACAGTGATTCAGAT 1222
                                                                                                                                                                                                                                                                                                                                                                                                    1223 GACTACATCATGTTCCTGCCTGACAACTCCCCAGCTATCCCCCAACCCCAGGCTCGGAC 1282
                  461
                                                                                                                                                                                                                            :::||| :::|||| 397
                                                                                                                                                                                                                                                                                                                                                                                                                                    453
                                                                                                            357 ArglysGluSerLysSerIleLysTyrTrpCysLeuTrpGluGlyAlaGlnAsnGlyArg 376
                                                                                                                                                                                                                                                                                                       398 LeuGluGluProGlyAsnGlyThrPheThrValIleLeuAsnGlnLeuThrSerArgAsp 417
                                                                                                                                                                                                                                                                                                                                                                    437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  --Ly
                                         1130 CCCTGGCTCCATGCCCCATCTCTGAAGACCAGCTGTGAATAC------GTGAGCCTC
                                                                                                                                                                                                                                                                                                                                                                 418 AlaGlyPheTyrTrpCysLeuThrAsnGlyAspThrLeu-TrpArgThrThrValGluIl
                                                                                                                                                                                                                                                                                                                                                                                                                             437 eLys-----IleIleGluGlyGluProAsnLeuLysValProGlyAsnValTh
                                                                                   --GACGCTGCAGGCACAGGGGAG
                                                                                                                                                                               -----CysProLeuLeuValAspSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----LeuGlyGluThrLeu--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: WU, SHUJIAN
APPLICANT: SWEET, RAYMOND
APPLICANT: TRUNEH, ALEMSEGED
TITLE OF INVENTION: PIGRL-1, A MEMBER OF IMMUNOGLOBULIN
TITLE OF INVENTION: GENE SUPERFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1343 GAGCCCTCATCACTTCCCATGCCCCATCTCGACT 1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       svalprocysHisPheProCysLysPheSerSer 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/961,564A FILING DATE: 30-0CT-1997 CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: GH-70236
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-407-0700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/056,935
FILING DATE: 25-AUG-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 9, Application US/08961564A
Patent No. 6114515
                                                                                                                                                                                                                                            385 GlyTrpValLysAla-----
                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: RATNER & PRESTIA STREET: P.O. BOX 980 CITY: VALLEY FORGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23,031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM Compatible OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: PRESTIA, PAUL F
REGISTRATION NUMBER: 2
                                                                                                                                                                                                                                                                            1181 TACCACCAGCCTGCC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  453 rAlaVal-----
                                                                                     GCTCGTGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ΡA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-961-564A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE:
                                                                                                                                                                                                                                                                                                                                        1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   461
                                                                                                                                                                                377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                 q
                                                                                                                                                                             g
                                                                                                                                                                                                              ^{\circ}
                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                         δy
                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                      QΫ́
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                      _{\rm QY}
                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δŽ
                                                                                     δŽ
                                                                                                                                                 QΫ́
```

```
359 GAAAGTGACAGCGGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACC 418
                                                                                                                                                                                                                                                                                                                                                                                                  134 CCAGAAGTAAAGGTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCT 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               194 ------GAAATGCATGTGAGGATATATCTGTGCCGGGAGATG---GCTGGATCT 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       299 GITACICIGAAGCAATACCCACGCAAGAAICIGITCCIAGIGGAGGTAACACAGCIGACA 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23 ProThrSerValAsnArgHisThrArgLysTyrTrpCysArgGlnProGlyAlaArgGly 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                          4 ProGlu---GluValAsnSerValGluGlyAsnSerValSerIleThrCysTyrTyrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 43 GlyLeuCysIleThrLeuIleSerSerGluGlyTyrValSerSerLysTyrAlaGlyArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                239 GGAACATGTGGTACCGTGGTATCCACCACCAACTTCATCAAGGCAGAATACAAGGGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: ANDREW C. HIATT, JULIAN
APPLICANT: K.-C. MA, THOMAS LEHNER
TITLE OF INVENTION: IMMUNOGLOBULINS CONTAINING PROTECTION
TITLE OF INVENTION: PROTEINS IN PLANTS AND THEIR USES
                                                                                                                                                                                                                             109
41
19
41
6
                                                                                                                                                                                                                                                                  Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                 US-09-651-150B-1 (1-1911) x US-08-961-564A-9 (1-109)
                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ψ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/08/434,000A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Diskette, 1.44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          103 PheAspValSerLeuGluVal 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 10, Application US/08434000A Patent No. 6046037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    419 CAGAAAGTCACCCTGAATGTC 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E: Lyon & Lyon
633 West Fifth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Word Perfect 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskett
MEDIUM TYPE: 3.0 Diskett
MEDIUM TYPE: Storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C
                                                                             109 amino acids
                                                                                                                                                                                                                                                 187.00
56.07%
38.32%
5.36%
                TELEX: 846169
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA
610-407-0701
                                                                                                 TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
STREET: 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-434-000A-10
                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                            US-08-961-564A-9
```

```
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-312-157-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCACTTTACTTCCTGCCAGTATCAGGGGCCCTGAGGATCCTCCCAGAAGTAAAGGTAGA 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ::: |||:::||| || OGLuAsnSerThrPheVallleAsnIleAlaHisLeuThrGluAspThrGlySerTy 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCTGAA-----AT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        259 AICCACCACCAACTICAICAAGGCAGAATACAAGGGCCGAGTTACTGTGAAGCAATACCC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   319 ACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGCGGAGTCTA 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCCAGAAAGTCACCCTGAATGT 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCAAAATGGTT 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCTAGGGGCTCTTGGATGGACCTTGCACTCTAGAAGGGACAATGGACTTCTGGCTTTG 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------GlyAsnSerValSerIleThrCysTyrTyrProAspThrSerValAsnAr 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----Glyval 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9HisThrargLysTyrTrpCysArgGlnGlyAla---AsnGlyTyrCysAlaThrLeuIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199 GCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGTGGTACCGTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           serThrGlnSerPro----IlePheGlyProGlnAsp-ValSerSerIleGlu----
                                                                                                                                                                                                                                                                                                              Rat Polyimmunoglobulin Receptor
                                                                                                                                                                                                                                                                                                                                                                      769
53
28
51
31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerLeuPheAlaLeuLeuValThrValPheSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-651-150B-1 (1-1911) x US-08-434-000A-10 (1-769)
    .. described below:
08/367,395
                                                                                                                                                                                                                                                                                                                                                                                                    Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels:
                                                                                         NAME: Guise, Jeffrey W.
REGISTRATION NUMBER: 312/127
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 552-8400
TELEPAX: (619) 552-0159
TELEX. (679) 552-0159
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: described
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 10, Application US/09312157 Patent No. 6303341
                                                                                                                                                                                                TELEX: SEQUENCE LISTING INFORMATION FOR SEQ ID NO: 10: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                   1,32e-07
186.00
49.69%
32,52%
5,33%
                                              APPLICATION NUMBER: 08/36 FILING DATE: 12/30/94 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                   769 amino acids
                                                                                                                                                                                                                                                                                                             DESCRIPTION:
                                                                                                                                                                                                                                                                                single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     499 TCATCIG 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          137 rHisVal 139
                                                                                                                                                                                                                                                                amino acid
                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                           STRANDEDNESS:
TOPOLOGY: lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     127 1-----
                                                                                                                                                                                                                                                                                                                        US-08-434-000A-10
                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-312-157-10
                                                                                                                                                                                                                                                  LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49
                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q_{\overline{\mathbf{y}}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QΛ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
```

```
91 GCCACTITACTICCTGCCAGIAICAGGGCCCTGAGGATCCTCCCAGAAGIAAAGGIAGA 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -AT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          259 ATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGTTACTCTGAAGCAATACCC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31 TCTCTAGGGGCTCTTGGAIGGACCTTGCACTCTAGAAGGGACAATGGACTTCTGGCTTTG 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---GlyVal 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33 ------GlyasnSerValSerIleThrCysTyrTyrProAspThrSerValAsnAr 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 SerThrGlnSerPro----IlePheGlyProGlnAsp-ValSerSerIleGlu----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199 GCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGTGGTACCGTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rat Polyimmunoglobulin Receptor
APPLICANT: ANDREW C. HIATT, JULIAN
K.-C. MA, THOMAS LEHNER
TITLE OF INVENTION: IMMUNOGLOBULINS CONTAINING PROTECTION
PROTEINS IN PLANTS AND THEIR USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .51 GGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCTGAA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          769
53
28
51
31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-651-150B-1 (1-1911) x US-09-312-157-10 (1-769)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
Indels:
                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 SerLeuPheAlaLeuLeuValThrValPheSer--
                                                                                                                                                                                                                                                                                                                                                                             DOS 5.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                         OPERAIING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/312,157
FILING DATE: 14-May-1599
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Guise, Jeffrey W.
REGISTRATION NUMBER: 34,613
REFERENCE/DOCKET NUMBER: 212/127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE DESCRIPTION: SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/434,000
FILING DATE: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (619) 552-8400
TELEFAX: (619) 552-0159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM Compatible
                                                                                                                                ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth
Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 769 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE LISTING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                       storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                                                                          NUMBER OF SEQUENCES: 19 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.32e-07
                                                                                                                                                                                                    CITY: Los Angeles
                                                                                                                                                                                                                          STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               186.00
49.69%
32.52%
5.33%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                             COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 67-351
                                                                                                                                                                                                                                                                 ZIP: 90071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δã
```

```
Search co
                                                                                                               δy
                                                                                                                                              qq
                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                δy
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                   δy
                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŏλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δŏ
                                                                                                                                                                                 Óλ
                                                                                                                                                                                                                                                                                                                 δ
                                                                     oGluAsnSerThrPheValIleAsnIleAlaHisLeuThrGlnGluAspThrGlySerTy 108
                                                                                                               379 TGCCTGCGGAGCGGGCATGAACACAGACGGGGAAAGACCCCAGAAAGTCACCTGAATGT 438
                                                                                                                                                                                                      319 ACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGCGGAGTCTA 378
                                                                                                                                                                                 439 CCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCAAAATGGTT 498
Bovine Polyimmunoglobulin Receptor
                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: ANDREW C. HIATT, JULIAN
APPLICANT: K.-C. MA, THOMBA LEBHER
TITLE OF INVENTION: IMMUNOGLOBULINS CONTAINING PROTECTION
TITLE OF INVENTION: PROTEINS IN PLANTS AND THEIR USES
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: 633 West Fifth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       application below:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: 3.5" Diskette, 1.44 Mb MEDIUM TYPE: storage COMPUTER: TBM Compatible COMPATING SYSTEM: IBM P.C. DOS 5.0 SOFTWARE: WORD PERFECT 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 100
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: including approne APPLICATION DATA: described be APPLICATION NUMBER: 08/367,395
FILLING DATE: 12/30/94
ATTORNEY/AGENT INFORMATION:
NAME: Guise, Jeffrey W:
NAME: Guise, Jeffrey M:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/434,000A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         212/127
                                                                                                                                                                                                                                                                                                                                              Sequence 6, Application US/08434000A Patent No. 6046037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 212/
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 552-8400
TELEX: (619) 552-0159
TELEX: 67-3510
TELEX: SEQUENCE LISTING
INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.89e-07
182.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             757 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                               137 rHisVal 139
                                                                                                                                                                                                                                                499 TCATCTG 505
                                                                                                                                                                                                                 127 1-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-434-000A-6
                                                                                                                                                                                                                                                                                                                                US-08-434-000A-6
               68
                                                                                                                                                                                                                                                                                                                 RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                             g
                                                                                                                                                                                 δλ
                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                               q
                                                                                                             δŽ
                                               QY
```

.

```
259
                                                                                                                                                                                                                                                                                                                                                                                                                                                            99 GluSerGlyThrPheValValAspIleSerHisLeuThrHisLysAspSerGlyArgTyr 108
                                                                                                                                                                                                      --GAAATG 199
                                                                                                                                                                                                                                                                                                                                                           260 TCCACCACCAACTTCATCAAGGCAGAATACAAGGGCCGAGTTACTCTGAAGCAATACCCA 319
                                                                                                                                                                                                                                                                                                                                                                                                                                      320 CGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGCGGAGTCTAT 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             380 GCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCCAGAAAGTCACCCTGAATGTC 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29
                                                                                                                                                                                                                                            49
                                                                                                                                                                                                                                                                                                                     68
                                                                                                                                                                                                                                                                                                                                                                                              88
                                                                                                                                                      50 HisThrargLysTyrTrpCysArgClnGlyAla---GlnGlyArgCysThrThrLeulle
                                                                                                                                                                                                                                                                                 CATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGTGGTACCGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                69 SerSerGluGlyTyrValSerAspAspTyrValGlyArgAlaAsnLeuThrAsnPhePro
                                                                                                                                                                                                          ------GGCGGATCAGTTACCATCAAATGCCCACTTCCT
 21
44
16
4
                                                                                                                                122 CIGAGGAICCICCCAGAAGIAAAGGIAGAGGGGGAGCIG
 Conservative:
                                                                                           US-09-651-150B-1 (1-1911) x US-08-434-000A-6 (1-757)
                 Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  completed: September 14, 2003, 04:07:46
Ne : 46 secs
51.22%
34.15%
5.21%
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           440 CACAGIGAA 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGlnAsp 130
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                   200
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
```

- nucleic search, using sw model OM nucleic

September 13, 2003, 23:38:04; Search time 124 Seconds (without alignments) 6802.284 Million cell updates/sec Run on:

US-09-651-150B-1 1911 Perfect score:

1 aaaggagtaagcagcgtgtc......ttactctgtctccatccttt 1911 Sequence:

IDENTITY_NUC Gapop 10.0 , Gapext 1.0 Scoring table:

569978 seqs, 220691566 residues Searched:

1139956 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

1: /cgn2_6/ptodata/2/ina/5A_COMB.seg:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seg:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seg:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seg:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seg:*
6: /cgn2_6/ptodata/2/ina/PcTUS_COMB.seg:* Issued_Patents_NA:* ٠. Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Sequence 1, Appli	Sequence 1, Appli	m		14,	Ч	14,	1, 4	, ,	H	7	٠.	٠.	, ,	7	• ,	Sequence 15260, A		Sequence 15531, A	٠.		Sequence 2, Appli	Sequence 4, Appli	'n	1,	'n	Sequence 3, Appli
SUMMARIES	ID	US-09-050-861B-1	US-08-961-564A-1	US-08-961-564A-3	-09 - 724	US-08-232-463-14	-09 - 232	US-08-232-463-14	US-08-666-392A-1	US-09-199-926-1	-60-	US-09-368-590-1	US-09-252-991A-1441	US-09-252-991A-1675	US-09-252-991A-1539	US-09-160-496-4	-08-937	-09-252	-09-252-	-09-252	-09-252-991A-15	-09-252-991A-	US-09-416-509C-2	US-08-221-750A-4	- 84 - 8	US-08-221-750A-1	-880-	US-09-565-808-3
	DB	4	ĸ	m	4	-	4	Н	7	m	ĸ	m	4	4	4	4	4	4	4	4	4	4	4	٦	4	-	4	4
	Query Match Length	1911	2040	1047	1480	7218	2430	7218	1433	1433	152331	7812	989	1131	1671	1920	1984	429	750	1386	1461	618	936	1515	2571	7742	20966	672
ф	Query Match	100.0	96.4	35.4	29.5	2.9			2.2	•	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	Score	1911	1842.4	929	563.6	56.2	48.2	43.4	41.8	41.8	40.8	40.6	39.5	39.5	39.5	38.4	37.6	37	37	37	37	36.6	36.6	36.6	36.6	36.6	36.6	36.4
	Result No.	Н	2	3	4	2	9		හ ව	6 0	10	c 11		13	c 14	15	c 16	17		c 19	20	21	22	23	24	25	26	c 27

28 36.4 1.9 1044 1 US-07-975-526-3 29 36.4 1.9 1044 4 US-07-974-409C-425 30 36.4 1.9 1044 4 US-07-974-409C-425 31 36.4 1.9 1929 5 PCT-US93-00031-18 33 36.4 1.9 1932 5 PCT-US93-00031-20 34 36.4 1.9 1941 5 PCT-US93-00031-12 35 36.4 1.9 1941 5 PCT-US93-00031-12 36 36.4 1.9 2205 5 PCT-US93-00031-12 37 36.4 1.9 2205 5 PCT-US93-00031-14 38 36.4 1.9 2205 5 PCT-US93-00031-14 39 36.4 1.9 2217 5 PCT-US93-00031-16 39 36.4 1.9 2813 2 US-08-344-15599 41 36.4 1.9 2813 4 US-08-4482-073-4 42 36.4 1.9 3813 4 US-09-423-890-11 5 5 6 74 36.2 1.9 1260 4 US-09-252-991A-13265	Sequence 3, Appli	Sequence 18, Appl	Sequence 20, Appl	Sequence 236, App	Sequence 10, Appl	Sequence 22, Appl	Sequence 12, Appl	Sequence 14, Appl	Sequence 8, Appli	Sequence 16, Appl	Sequence 3, Appli	Sequence 99, Appl	90,	Sequence 4, Appli	11,	Sequence 1499, Ap	Sequence 13265, A
28 310 310 311 312 313 313 313 313 313 313	US-07-975-526-3 US-07-974-409C-425	PCT-US93-00031-18	PCT-US93-00031-20	US-09-620-312D-236	PCT-US93-00031-10	PCT-US93-00031-22	PCT-US93-00031-12	PCT-US93-00031-14	PCT-US93-00031-8	PCT-US93-00031-16	US-08-482-073-3	US-08-344-155C-99	US-09-009-490A-90	US-08-482-073-4	US-09-423-890-11	US-09-252-991A-1499	US-09-252-991A-13265
28 310 310 311 312 313 313 313 313 313 313	⊢ 4	Ŋ	Ŋ	4	Ŋ	Ŋ	Ŋ	വ	Ŋ	Ŋ	4	~	4	4	7	7	₹
22288888888444444444444444444444444444	1044	1929	1932	1935	1941	1941	2205	2208	2217	2220	2811	2813	2813	3080	3332	066	1260
00000000000000044444 80001000400000010040	9.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.2	36.2
υυ	28	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
																O	υ

ALIGNMENTS

```
301 TACTCTGAAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGGTGACAGA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 TCTAGAAGGGACAATGGACTTCTGGCCTTTGGCCACTTTACTTCCTGCCAGTATCAGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 ATGCCCACTTCCTGAAATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 AACATGTGGTACCGTGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGT
                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                 ·,
                                                                                                                                                                                                                                                                                                                    Length 1911;
                                                                                                                                                                                                                                                                                                                                               Indels
                                                             APPLICANT IN COMMODITION.
APPLICANT SPAGES AS A TARGET FOR DRUG SCREENING TITLE OF INVENTION: TOSO AS A TARGET FOR DRUG SCREENING FILE REFERENCE: RIGL-002CON
CURRENT APPLICATION NUMBER: US/09/050,861B
CURRENT FILING DATE: 1998-03-30
PRIOR FILING DATE: 200-08-30
PRIOR FILING DATE: 1998-03-30
NUMBER OF SEQ ID NOS: 35
                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                    DB 4;
                                                                                                                                                                                                                                                                                                                  Score 1911; I
Pred. No. 0;
; Mismatches
                            Sequence 1, Application US/09050861B Patent No. 6555314
                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                               SOFTWARE: PatentIn version 3.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapiens
US-09-050-861B-1
                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 1911; Conserv
                                                         ; GENERAL INFORMATION:
RESULT 1
US-09-050-861B-1
                                                                                                                                                                                                                                             LENGTH: 1911
                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                   δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QΣ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ōλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       οqα
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ΩŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      òγ
```

ó

120

09 09

240

180

300

 $^{\circ}$

1156

1084

1216

1264 1336 1324 1396 1384 1456 1444 1515

1144

```
CCATCTCTGAAGACCAGCTGTGAATACGTGAGCCTCTACCACCAGCCTGCCGCCATGATG 1204
                         1516 CCCTGTAGTTGACAGGTAAGCTGTAGGCATGTAGAGCAATTGTCCCAATGCCACTTGCT
                                                                                                                                                                                                                                                                                                                                                                  AGCTCCCAGAGGCCCCGCGGGTCGCCGCGCGCTCCCAAAACAACATCTACAGCGCC
                                                     TGCCCGCGGGGGGCGGTGGAGCGGACGCTGCAGGCACAGGGGAGGCCCCCGTTCCCGGC
                                                              CCCGGAGCGCCGTTGCCCCCCCCCCGCTGCAGGTGTCTGAATCTCCCTGGCTCCATGCC
                                                                                                                                                                 GAGGACAGTGATTCAGATGACTACATGTTCCTGCCTGACAACTCCCCAGCTATCCC
                                                                                                                                                                            1277 GAGGACAGTGATTCAGATGACTACATGTTCCTGCCTGACAACTCCCCAGCTATCCCC
                                                                                                                                                                                                     CTGCTTCATGTGTTCTCAGAGCCCTCATCACTTCCCATGCCCCATCTCGACTCCCATCCC
                                                                                                                                                                                                                                                    CATCIATCIGIGGCCCTGAGCATGGCTCTGCCCCCAGGTCGTCTTGCACCTTGGCAGC
                                                                                                                                                                                                                                                                                       1457 CATCTATCTGT-GCCCTGAGCATGGCTCTGCCCCCAGGTCGTCTTGCACCTTGGCAGC
                                                                                                                                                                                                                                                                                                                    CCCCTGTAGTTGACAGGTAAGCTGTAGGCATGTAGAGCAATTGTCCCAATGCCACTTGCT
                                                                                                                                                                                                                                                                                                                                                      TCCTTTCCAAGCCGTCGAACAGACTGTGGGATTTGCAGAGTGTTTCTTCCATGTCTTTGA
                                                                                                                                                                                                                                                                                                                                                                                             CCACAGGGTGTTGTTGCTGCCAGGCTCTAGATCACATGGCATCAGGCTGGGGCAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                       TAGCTATTGTCTCGGGCAT-CCTTCCCAGGGTTGGGTCTTACACAAATAGAAGGCTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CICTGAGTIATGTGACGTGCCTCAGCCCCATGGACTAAGCAGGGGTCTGGTAT--AAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CICCIGGAAACGCCITTGCCCTGATCCAAATGTTAGCACTTGCTAGTGAACGTCTACTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTCAAGTTCTATGCTAAAGGCAATTTATCTTGATGTGATGATAAACCAAACTTATTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1862 AAGATATGCATATATCCATAAATTCTCTTTACTCTGTCTCCATCCTTT 1911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1935 AAGATATGCATATATCCATAAATTCTCTTTACTCTGTCTCATCACTT 1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Application US/08961564A Patent No. 6114515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: WU, SHUJIAN
APPLICANT: SWEET, RAYMOND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-961-564A-3
                                                                                                                                                                1205
                                                                                       1085
                                                                                                                                              1217
              965
                                 1037
                                                    1025
                                                                     1097
                                                                                                          1157
                                                                                                                             1145
                                                                                                                                                                                                    1265
                                                                                                                                                                                                                                          1325
                                                                                                                                                                                                                                                            1397
                                                                                                                                                                                                                                                                              1385
                                                                                                                                                                                                                                                                                                                   1445
                                                                                                                                                                                                                                                                                                                                                       1505
                                                                                                                                                                                                                                                                                                                                                                                             1565
                                                                                                                                                                                                                                                                                                                                                                                                                                 1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1742
                                                                                                                                                                                                                                                                                                                                                                                                               1636
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1875
                             qq
                                                   Qy
                                                                     q
                                                                                                         QQ
                                                                                                                                              g
                                                                                                                                                                                  qq
                                                                                       δ
                                                                                                                            QΫ
                                                                                                                                                               δ
                                                                                                                                                                                                    δ
                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                            Q_{Y}
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                    ΟŸ
                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                            QΥ
                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                \dot{\Omega}
                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ά
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΣ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΫ́
                                                                                                                  136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             196
                                                                                                                                   124
                                                                                                                                                                                          256
                                                                                                                                                                        184
                                                                                                                                                                                                            244
                                                                                                                                                                                                                                                 304
                                                                                                                                                                                                                                                                   376
                                                                                                                                                                                                                                                                                                        436
                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                          424
                                                                                                                                                                                                                                                                                                                                            496
                                                                                                                                                                                                                                                                                                                                                               484
                                                                                                                                                                                                                                                                                                                                                                                                     544
                                                                                                                                                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                                                                                                                                                                                                                                                                                                           919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       964
                                                                                                64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                904
                                                                                                                                                                                                       GAAGGGACAATGGACTTCTGGCTTTTGGCCACTTTACTTCCTGCCAGTATCAGGGCCCCTG
                                                                                                                                                                     AGGATCCTCCCAGAAGTAAAGGTAGAGGGGGGGGGCGGGTCAGTTACCATCAAATGC
                                                                                                                                                                               TGTGGTACCGTGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGTTACT
                                                                                                                                                                                                                                                        CTGAAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGT
                                                                                                                                                                                                                                                                                           GACAGCGGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCAGAAA
                                                                                                                                                                                                                                                                                                                                 GTCACCCTGAATGTCCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAG
                                                                                                                                                                                                                                                                                                                                                                      ACTCCAAAATGGTTTCATCTGCCCTATTTGTTCCAGATGCCTGCATATGCCAGTTCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                          AAATTCGTAACCAGAGTTACCACACCAGCTCAAAGGGGCAAGGTCCCTCCAGTTCACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTGACAAGCCCCGGAACCTTCCTGCCATCCACTACAGCCTCAAAAATCTCAGCTCTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGCTGCTCAAGCCCCAGACGCCCAGCTACAACCACCACCAGGCTGCACAGGCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCACTGGACTATGGCTCACAGTCTGGGAGGGAAGGCCAAGGATTTCACATCCTGATCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCATCCTGGGCCTTTTCCTGCTGGACTTCTGGGGCTGGTGGTGAAAAGGGCCGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGAGGAAAGCCCTCTCCAGGCGGCCCGCCGACTGGCCGTGAGGATGCGCGCCCTGGAG
                                                                             Gaps
                                                                             5,
                                                           Length 2040;
                                                                             Indels
                                                           3;
                                                                            11;
                                                           BB
                                                         ore 1842.4;
ed. No. 0;
Mismatches
                                                         Score
Pred.
                                                                          0;
                                                         96.48;
99.28;
                                                                Best_Local Similarity 99.2
Matches 1894; Conservative
TYPE: nucleic acid
STRANDEDNESS: singl
TOPOLOGY: linear
MOLECULE TYPE: cDNA
; TYPE: nucl
; STRANDEDNES;
; TOPOLOGY:
; MOLECULE TYPE
US-08-961-564A-1
                                                                                            2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    977
                                                                                                              11
                                                                                                                                65
                                                                                                                                                  37
                                                                                                                                                                     125
                                                                                                                                                                                       197
                                                                                                                                                                                                        185
                                                                                                                                                                                                                          257
                                                                                                                                                                                                                                             245
                                                                                                                                                                                                                                                                317
                                                                                                                                                                                                                                                                                  305
                                                                                                                                                                                                                                                                                                                                                                                                                  557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665
                                                         Query Match
                                                                                                                                                                                                                                                                                                    377
                                                                                                                                                                                                                                                                                                                      365
                                                                                                                                                                                                                                                                                                                                        437
                                                                                                                                                                                                                                                                                                                                                           425
                                                                                                                                                                                                                                                                                                                                                                             497
                                                                                                                                                                                                                                                                                                                                                                                                 485
                                                                                                                                                                                                                                                                                                                                                                                                                                     545
                                                                                                                                                                                                                                                                                                                                                                                                                                                      617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     797
                                                                                                                                               qq
                                                                                            δŏ
                                                                                                             g
                                                                                                                                δy
                                                                                                                                                                   Q_{\lambda}
                                                                                                                                                                                    Db
                                                                                                                                                                                                      ŏ
                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                QY
                                                                                                                                                                                                                                                                                                  Op
                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                   ØΣ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ۵y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QΣ
```

1575 1564 1624

1683 1754 1741 1814 1801

```
242 ACAIGIGGTACCGTGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGCCGAGTT 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280 ACCCTGACGCCATGCTTGGATAAGAAGCTATTCCTAGTGGAGATGACACAGCTGACGGAA 339
                                                                                                                                                                                                                                                                                                                  775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  103 CTGAGAGTCCTCCCCAGAAGTACAGCTGAATGTAGAGTGGGGGTGGATCCATTATCATCGAA 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  222
                                                                                                                                                                                                                                                718
                                                                                                                                                                                                                                                                                                                                                 858
                                                                                                                                                 619
                                                                                                                                                                                  629
                                                                                                                                                                                                                 739
                                                                                                                                                                                                                                                                                 799
                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  163 IGCCCACTCCCTCAACIACAGGTAAGGATGTATCTGTGTGCGGCAGATGGCCAAACCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    302 ACTCTGAAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182 TGCCCACTTCCTGAAATGCATGTGAGGATATATCTGTGCCGGGAGATGCCTGGATCTGGA
                                                                                                                62 CTAGAAGGGACAATGGACTTTTGCCACTTTACTTCCTGCCAGTATCAGGGGCC
                                                                 660 TAGCAGGIGACAAGCCCCG-AACCTTCCIGCCATCCACTACAGCCTCAAAAATCTCAGCT
                                                                                                                                                                                                                                                                     719 CIGGAGGGCIGCICCAAGCCCC---AGACGCCCAGCIACAACCACCACCAGGCIGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGAGGATCCTCCCAGAAGTAAAGGTAGAGGGGGGGGGCTGGGCGGATCAGTTACCATCAAA
CACTCCTCCCCCACCACCCAAA-TCACCCACCGCCC-TCGAGTGTCCCAGAGCATCTTCAG
                                                  485 ACTCCAAAATGGTTTCATCTGCCCTATTTGTTCCAGATGCCTGCATATGCCAGTTCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Watson, James D
APPLICANT: Warson, James D
APPLICANT: Warson, James D
APPLICANT: Murison, James G
TITLE OF INVENTION: Polynucleotides, polypeptides expressed
TITLE OF INVENTION: Polynucleotides and methods for their u
FILE REFERENCE: 11000.1050U1
CURRENT PAPLICATION NUMBER: US/09/724,864
CURRENT FILING DATE: 2000.11-28
PRIOR FILING DATE: 1999-12-23
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63;
                                                                                                                                                                                                                                                                                                                                                                                    Score 563.6; DB 4; Length 1480;
Pred. No. 5.4e-159;
0; Mismatches 389; Indels 63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 11, Application US/09724864 Patent No. 6380362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 29.5%;
Best Local Similarity 67.5%;
Matches 940; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
US-09-724-864-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-724-864-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                       602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ^{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                       QΫ́
                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                                                         ÓΣ
                                                       QΫ́
                                                                                      op
                                                                                                                     οy
                                                                                                                                                      a
                                                                                                                                                                                         ÓΥ
                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            261 CCACTTCCTGAAATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAGCGGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCAGAAA 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GICACCCIGAAIGICCACAGIGAAIACGAGCCAICAIGGGAAGAGCAGCCAAIGCCIGAG 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65 GAAGGGACAATGGACTTCTGGCTTTTGGCCACTTTACTTCCTGCCAGTATCAGGGCCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGATCCTCCCAGAAGTAAAGGTAGAGGGGGGGGGCTGGGCGGGATCAGTTACCATCAAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCACTTCCTGAAATGCATGTGAGGATATATCTGTGCCGGGGAGATGGCTGGAACTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTGGTACCGTGGTATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CIGAAGCAAIACCCACGCAAGAAICIGIICCIAGIGGAGGIAACACAGCIGACAGAAAGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35.4%; Score 676; DB 3; Length 1047; 94.6%; Pred. No. 7.6e-193; Live 0; Mismatches 34; Indels 1.
                         TITLE OF INVENTION: PIGRL-1, A MEMBER OF IMMUNOGLOBULIN TITLE OF INVENTION: GENE SUPERFAMILY
                                                                                                                                                                                                          MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
COMPATING SYSTEM: DOS
SOFFWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/961,564A
FILING DATE: 30-OCT-1997
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: GH-70236 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/056,935
FILING DATE: 25-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: PRESTIA, PAUL F
REGISTRATION NUMBER: 23,031
                                                         NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: RATHER & PRESTIA
STREET: P.O. BOX 980
CITY: VALLEY FORGE
            TRUNEH, ALEMSEGED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 846169
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 610-407-0700
TELEFAX: 610-407-0701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 1047 base pairs TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 35.4°
Best Local Similarity 94.6
Matches 785; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single
                                                                                                                                                                                          COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                             USA
                                                                                                                                                                             19482
                                                                                                                                            STATE: PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-961-564A-3
                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              425
```

٠. ھ

q δ q

q ă qq QYqq Qγ Ω δy Dp Qγ

δ qq δŏ qq QY ద δ q $\dot{\Omega}$ Dp δ ΩD

```
1172 GTGAGCCTCTACCACCAGCCTGCCGCCATGATGGAGGACAGTGATTCAGATGACTACATC 1231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1232 AATGIICCIGCCIGACAACICCCCAGCIAICCCCCAACCCCAGGCICGGACIGIGGIGCC 1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1052 GCTGCAGGCACAGGGGCCCCCGTTCCCGGCCCCGGAGCGCCGTTGCCCCCGGCCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1112 CTGCAGGTGTCTGAATCTCCCTGGCTCCATGCCCCATCTCTGAAGACCAGCTGTGAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 7218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                            Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                       FOWLPOX VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
2.9%; Score 56.2; DB 1
Best Local Similarity 3.4%; Pred. No. 3.4e-06;
Matches 13; Conservative 223; Mismatches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30472/114 IMMU
                                                                                                                                                                                                                                               500
                                                                                                                                                                                                                                             Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/07/935,313 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,463
                                                                                                                                                                                                                                                                                                                                                                PC-DOS/MS-DOS
                                                                                                  Sequence 14, Application US/08232463 Patent No. 5670367
                                                                                                                                                        APPLICANT: SCHETELINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT
TOMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLGY & Lardner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: EP 91 114
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: BENT. Stephen A
REGISTRATION NUMBER: 29,768
                                                                                                                                                                                                                                E: Foley & Lardner
1800 Diagonal Road,
                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 30
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (703)836-9300
1387 TCTATCTGTGGC 1398
                          1415 TATCTGAATGCC 1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 7218 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (703)683-4109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 899149
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                            DORNER, F.
                                                                                                                                                                                                                                                         US-08-232-463-14
                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
                                                                                                                Patent No. 5670367
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IMMEDIATE SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
                                                                                US-08-232-463-14
                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX:
                                                                                                                                                                                                                                             STREET:
δŽ
                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGCGGCGCCTCGTGGAGCGGACGCTGCAGGCACAGGGAGGCCCCCGTTCCCGGCCCC 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGCGCCGTTGCCCCCCCCCCCCCGCTGCAGTGTCTGAATCTCCCTGGCTCCATGCCCCA 1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1328 CTTCATGTGTTTCTCAGAGCCCT-CATCACTTCCCATGCCCCATCTCGACTCCCATGGCCA 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACAGTGATTCAGATGACTACATCAATGTTCCTGCCTGACAACTCCCCAGCTATCCCCCA 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCTGAAGACCAGCTGTGAATACGTGAGCCTCTACCACCAGCCTGCCGCCATGATGGAG 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          583
                                                                                                                                                                                                                                          643
                                                                                                                                                                                                                                                                       639
                                                                                                                                                                                                                                                                                                   703
                                                                                                                                                                                                                                                                                                                              669
                                                                                                                                                                                                                                                                                                                                                          763
                                                                                                                                                                                                                                                                                                                                                                     823
                                                                                                                                                                                                                                                                                                                                                                                                                                            816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTGACAGCGGAGTCTATGCCTGCGGAGCGGGCATGAACACAGAGCGGGGAAAGACCCAG 421
                                                             AAAGTCACCCTGAATGTCCACAGTGAATAC---GAGCCATCATGGGAAGAGCAGCCAATG
                                                                                                                                                  TCTGAGCGCCAAGATGGTTGCACAGATTTCTGCAGCACCAGATGCCCTGGCTCCACGGG
                                                                                                                                                                             --TGCATATGCCAGTTCTTCCAAATTCGTAACCAGAGTTACCACACCAGCTCAAAGGGGC
                                                                                                                                                                                             TCAAAAATCTCAGCTCTGGAGGGCTGCTCAAGCCCCAGACGCCCAGCTACAACCACCAC
                                                                                                                                                                                                                                                                                                                                                                                                             -----ATTICACAICCIGAICCCGACCAICCIGGGCCIIIIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   863 CIGCIGGCACITCIGGGGCIGGIGAAAAGGGCCGIIGAAAGGAGGAAAGCCCICCC
                                                                                                                                                                                                                                                                                             TCCAGAGCATCTTCAGTAGCAGGTGACAAGCCCCGAACCTTCCTGCCATCCACTACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---CAGAGGCCCCGGGGGTCGCCGCGCGCGCTCCCAAAACAACATCTACAGCGCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  923 AGGCGGCCCGCCGACTGGCCGTGAGGATGCGCGCCCTGGAGAGCTCC------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1295 CCCCAGGGCCCAGATCTTCATGCCAATGAGTTCTGCCTGTTTGCTGATGTCTAGCACGTT
                                                                                                                       CCTGAGACTCCAAAATGGTTTCATCTGCCCTATTTGTTCCAGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99-----
                                                                                        400
                                                                                                                                                                                                                                                                                                                                                                                                                                        757
       362
                                                                                                                      479
                                                                                                                                                  460
                                                                                                                                                                              526
                                                                                                                                                                                                                                                                                                                                                    704
                                                                                                                                                                                                                                                                                                                                                                                                            764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          971
```

q ŏ

δλ g

q δ

ŏ q 2 a δ Db δy q QY qq $\dot{\Omega}$ q Qγ g δŏ qq Qγ g

ö

Gaps

·;

ŏ Ω ò qq δ q

```
RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΟŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                  g
QΫ́
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Susan G. Stuart.
APPLICANT: Laura Stuve
TITLE OF INVENTION: DETECTION OF ALTERED EXPRESSION OF GENES REGULATING CELL
TITLE OF INVENTION: PROLIFERATION
FILE REFERENCE: PA-0003 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGCTCCCAGAGGCCCCGCGGGTCGCCGCGACCGCGCTCCCAAAACAACATCTACAGCGC 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCGCCCAGAGCCCCGGCGCCCCCGGGCCTGGAGGACGAAGTCGCCACGCC 1641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1162 CAAGIICAGICAGGIAGCAGCCCIGCCAGGCCCICGAGGCCICCIGGGIGGIGGIGGCACA 1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1222 TACCCTGCAGAAGACCCTCCAGACCACCATCTCGGCTGTGACATGGGCACCTGCAGCTGT 1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1342 GGGGAGGGCCATGTCCCTATCAGATGCCCTGAAGGGCGTTACTGACAACGTGGTGGACAC 1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGIGGIGCATTACGIGCCGCTCCCCAGGCIGTCGCTGAIGGAGCCCGAGAGCGAATICCG 1461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       903
                                                                                                                1292 AAGGAGTCTCATCTATCTGCTGATGTCCAATACCTGCTTCATGTGTTCTCAGAGCCCTCA 1351
                              664 AGGTGACAAGCCCCGGAACCTTCCTGCCATCCACTACAGCCTCAAAAATCTCAGCTCTGGA 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGGCTGCTCAAGCCCCAGAGGCCCAGCTACAACCACCACACCAGGCTGCACAGGCAGAG 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       784 AGCACTGGACTATGGCTCACAGTCTGGGAGGGAAGGCCAAGGATTTCACATCCTGATCCC 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    904 AAGGAGGAAAGCCCTCTCCAGGCGGGCCCGCCGACTGGCCGTGAGGATGCGCCCTGGA 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844 GACCATCCTGGGCCTTTTCCTGCTGCACTTCTGGGGCTGGTGGTGAAAAGGGCCGTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604 CTCCTCCCCCACCACCCAAATCACCCACCGCCTCGAGTGTCCCAGAGCATCTTCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   544 CAAATTCGTAACCAGAGTTACCACACCACCTCAAAGGGGCCAAGGTCCCTCCAGTTCACCA
                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 2430;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          293; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 48.2; DB 4;
Pred. No. 0.00045;
0; Mismatches 293;
                                                                                                                                                                   1412 CIGCCCCAGGICGICTIGCACACCIT 1438
                                                                                                                                                                                           1402 YYYYYYYYYYYYYYYYYYYYYYYYYY 1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/232,160
CURRENT FILING DATE: 1999-01-15
NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                                                                           Sequence 16, Application US/09232160 Patent No. 6368794 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: 3688209
US-09-232-160-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 2.57
Best Local Similarity 43.33
Matches 224; Conservative
                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Steve Daniel APPLICANT: James Gilmore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PERL Program
ERQ ID NO 16
LENGTH: 2430
                                                                                                                                                                                                                                                                       RESULT 6
US-09-232-160-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         724
                                           1282
                                                                                 1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QY
```

qq

ŏ g QΣ

ò

ρp

qq ò

δ

δŽ

```
195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                256 GGIATCCACCACCACTTCATCAAGGCAGAATACAAGGGCCGAGTTACTCTGAAGCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         136 AGAAGTAAAGGTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAATGCCCACTTCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATGCATGTGAGGATATATCTGTGCCGGGAGATGGCTGGATCTGGAACATGTGGTACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          316 CCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGCGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 7218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                        1642 CGCAGCGCCGGGCTTCCCGGCCGTGCCCGC 1678
1024 CIGCCCGCGCGCGCTCGTGGAGCGGACGCTGCAGGC 1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 43.4; DB 1;
Pred. No. 0.024;
07; Mismatches 153;
                                                                                                                                                                                        APPLICANT: DORNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
NUMBER OF SEQUENCES: 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30472/114 IMMU
                                                                                                                                                                                                                                                                                                                               500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
APPLICATION NUMBER: EP 91 114 300.6
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,463
                                                                                                                                  Sequence 14, Application US/08232463
Patent No. 5670367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative 207;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 30.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
                                                                                                                                                                                                                                                                                                               ADDRESSEE: Foley & Lardner
STREET: 1800 Diagonal Road,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29,768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7218 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (703)683-4109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: BENT, Stephen A. REGISTRATION NUMBER: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 899149
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-232-463-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 11; Conserval
                                                                                                                                                                                                                                                                                                                                               CITY: Alexandria STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 22313-0299
                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IMMEDIATE SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                      US-08-232-463-14/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX:
                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGIH:
```

ó

g

δ

QQ Qγ

ŏ

```
1021 CGCCTGCCCGCGCGCGCGCTCGTGGAGCGGACGCTGCAGGGCACGGGGAGGCCCCCGGTTCC 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961 GGAGAGCTCCCAGAGGCCCCGCGGGGTCGCCGCGACCGCGCTCCCAAAACAACATCTACAG 1020
                                                                                                                                                                                                                                                                                             841 CCCGACCATCCTGGGCCTTTTCCTGCTGGCACTTCTGGGGCTGGTGGTGGAAAGGGCCGT 900
                                                                                                                                                                                                                                                                                                                    901 IGAAAGGAGGAAAAGCCCTCTCCAGGCGGGCCGCCGACTGGCCGTGAGGATGCGGCGCCCT 960
                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: (countries other than U.S.): Royal Children's Hospital APPLICANT: Research Foundation
                                                                                                                                                                                                                                                    ·;
                                                                                                                                                                                                     2.2%; Score 41.8; DB 2; Length 1433; 46.7%; Pred. No. 0.027; Live 0; Mismatches 152; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .081 CGCCCCGGAGCGCCGTTGCCCCCCCCCCCCGCTGCAGGTGTCTGA 1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    126 ceccaccarecrecercecaccececececececes 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: (U.S. only): George A. WERTHER and APPLICANT: Christopher J. WRAIGHT
TITLE OF INVENTION: A METHOD FOR THE PROPHYLAXIS AND/OR TITLE OF INVENTION: TREATMENT OF PROLIFERATIVE AND/OR TITLE OF INVENTION:

INFLAMMATORY SKIN DISORDERS
NUMBER OF SEQUENCES: 11
         : Binkert, C., et al. Cloning, sequence analysis and expression...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Brumbaugh, Graves, Donohue & Raymond STREET: 30 Rockefeller Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A30626-PCT-USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0S/09/199,926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/666,392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 1, Application US/09199926
; Patent No. 6284741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ Version 2.0 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/199,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: MacLeod, Janet M.
REGISTRATION NUMBER: 35,263
REFERENCE/DOCKET NUMBER: A30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-408-2500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                Matches 133; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: 212-408-250
TELEFAX: 212-765-2519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
                                                                                                                   PAGES: 2497-2502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM:
                                                                                                                                                                                                                              Best Local Similarity
                                                      EMBO J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: U.S.A. ZIP: 10112-0228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE:
                                                                                               1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-199-926-1/c
                             TITLE: Cl
JOURNAL:
                                                                                                                                                              US-08-666-392A-1
                                                                          VOLUME:
                                                                                            ISSUE:
                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE:
                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΫ́
                                                                                   376 CTATGCCTGCGGAGGGGGCATGAACACAGACCGGGGAAAGACCCAGAAAGTCACCCTGAA 435
                                                                                                                                 436 TGTCCACAGTGAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCAAAATG 495
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: (countries other than U.S.): Royal Children's Hospital APPLICANT: Research Foundation APPLICANT: Research Foundation (U.S. only): George A. WERTHER and APPLICANT: Curiscopher J. WRAIGHT TITLE OF INVENTION: A METHOD FOR THE PROPHYLAXIS AND/OR TITLE OF INVENTION: TREATMENT OF PROLIFERATIVE AND/OR TITLE OF INVENTION: INFLAMMATORY SKIN DISORDERS NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSEE: Brumbaugh, Graves, Donohue & Raymond: 30 Rockefeller Plaza
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A30626-PCT-USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 20-AUG-1996
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/AU95/00410
FILING DATE: 06-JUL-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OFFWARE: FASTEM: DOS
SOFTWARE: FASTES Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/666,392A
FILLING DATE: 20-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/08666392A Patent No. 5929040 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35,263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: A3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-408-2500
TELEFAX: 212-765-2519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION:
NAME/KEY: Coding Sequence
LOCATION: 235.1101
OTHER INFORMATION:
PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: Coding Sequence LOCATION: 118...234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1433 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                1055 CCTCGACCTGC 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MacLeod, Janet M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                       GITICALCIGC 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 118...1101
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U.S.A. ZIP: 10112-0228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                             RESULT 8
US-08-666-392A-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΝŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
CITY: Ne
STATE: 1
```

```
Matches 117; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: (1021)...(1023)
NAME/KEY: unsure
LOCATION: (2266)...(2268)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: (1)...(6879)
NAME/KEY: unsure
LOCATION: (100)...(102)
NAME/KEY: unsure
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22156 CCCCC 22160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1155 AGACC 1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 97; Conserv
                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 1
LENGTH: 7812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-368-590-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Óλ
                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                           οp
                                                                                                                                                                                             δλ
                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGAGCTCCCAGAGGCCCCGCGGGGTCGCCGCGACCGCGCTCCCAAAACAACATCTACAG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021 CGCCTGCCCGCGCGCGCGCTCGTGGAGCGGACGCTGCAGGCCACAGGGGAGGCCCCCGTTCC 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           246 GAACAGCACCTCCGCGCGCGCCCCGCCGCCGCCACTCGCCCCAGTAGCAGCAGCAG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841 CCCGACCATCCTGGGCCTTTTCCTGCTGCACTTCTGGGGCTGGTGAAAAGGGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENURAL INFORMATION:
APPLICANT: PAO, YANG
TITLE OF INVENTION: NOVEL MOLECULES OF TANGO-77 RELATED PROTEIN FAMILY
TITLE OF INVENTION: AND USES THEREOF
FILE REPERENCE: 09404/052001
CURRENT APPLICATION NUMBER: US/09/128,155
CURRENT APPLICATION NUMBER: US 60/091,650
EARLIER PILING DATE: 1998-08-03
EARLIER FILING DATE: 1998-07-02
EARLIER FILING DATE: 1997-08-04
NUMBER OF SEQ ID NOS: 18
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2.2%; Score 41.8; DB 3; Length 1433; 46.7%; Pred. No. 0.027;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081 CGGCCCCGGAGCGCCGTTGCCCCCCCCCCCCGCTGCAGGTGTCTGA 1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    126 CGGCAGCATGCTGCGGCGCGCGGCGGCGGGCGAGCA 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                        NAME/KEY: Coding Sequence
LOCATION: 118...234
OTHER INFORMATION:
NAME/KEY: Coding Sequence
LOCATION: 235...1101
OTHER INFORMATION:
PUBLICATION INFORMATION:
AUTHORS: Blinkert, C., et al.
TITLE: Cloning, sequence analysis and expression...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches 152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 16, Application US/09128155
Patent No. 6117654
                  --
                                                                                                                                                        NAME/KEY: Coding Sequence LOCATION: 118...1101 OTHER INFORMATION:
                           SEQUENCE CHARACTERISTICS:
LENGTH: 1433 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best_Local Similarity 46.7
Matches 133; Conservative
                INFORMATION FOR SEQ ID NO:
                                                                                                                    MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                      ISSUE: 1989
PAGES: 2497-2502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 16
LENGTH: 152331
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                     VOLUME: 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 10
US-09-128-155-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-199-926-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                        FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
```

```
22096 ecgeeececececececes and second control of the control of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22036 eccececececececececececentacecececencacecececececececececece 22095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1104 egcagecrecaggadadecrecregegegegeccaacreregecrecrecagererg 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1095 CGTTGCCCCCCCCCCCCCCCGCTGCTCTCTCCCTGGCTCCCATGCCCCATCTCTGA 1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                915 CCCTCTCCAGGCGGGCCCGCCGCGGGCTGGCGTGAGGATGCGCGCCCTGGAGAGCTCCCAGA 974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1035 GCGCTCGTGGAGCGGACGCTGCAGGCACAGGGGCCCCCGGTTCCCGGCCCCGGAGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   924 GCCGGGCCCGCCGACTGGCCGTGAGGATGCGCCCTGGAGAGCTCCCAGAGGCCCCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  975 GGCCCCGCGGGTCGCCGCGCGCGCTCCCAAAACAAACTTACTACAGCGCCTGCCCGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                         DB 3; Length 152331;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 7812;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Solimena, Michele
TITLE OF INVENTION: INTERACTING POLYPEPTIDES FOR
TITLE OF INVENTION: AUTOANTIGENS OF AUTOIMMUNE DISEASES
FILE REPERENCE: 101918-200 (CCR-941)
CURRENT APPLICATION NUMBER: US/09/368,590
CURRENT FILING DATE: 1999-08-04
EARLIER APPLICATION NUMBER: 60/095,657
EARLIER FILING DATE: 1998-08-07
NUMBER FILING DATE: 1998-08-07
NUMBER: FILING DATE: 1998-08-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches 128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 40.6; DB Pred. No. 0.17; 0); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 0.88;
                                                                                                                                                                                                                                                                                                                  2.1%; Score 40.8;
47.8%; Pred. No. 0.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version 3.0
| NAME/KEY: misc_feature
| LOCATION: (1)...(15331)
| OTHER INFORMATION: n = A,T,C or G
| US-09-128-155-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-368-590-1/c; Sequence 1, Application US/09368590; Patent No. 6187563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
```

σ

```
JUNEAR AND ALLY MARC J. Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AERGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERBACE: 107196, 136
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
SEQ ID NO 1539
LENGHE: 1671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1432
                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1431 CGCAGGCCCTGGCCGAAGCGCAGCACCAGCAGCAACGGCGCCCCAGTAGCCGATGCTG 1372
                                                                                                                                                                                                                                                                                                                               936 GACTGGCCGTGAGGATGCGCGCCCTGGAGAGCTCCCAGAGGCCCCGGGGTCGCCGCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             876 IGGGGCTGGTGGTGAAAAGGGCCGTTGAAAGGAGGAAAAGCCCTCTCCCAGGCGGGCCCGCC
                                                                                                                                                                                                                                            861 TGCCGCCCGCCCGTCTCCCGTGGCCAGCGCGCCCCCCCACTCGCCGCCGAGGC
                                                                                                                                                                                                                                                                                                    996 CGCGCTCCCAAAACAACATCIACAGCGCCTGCCGCGCGCGCGCGCTGGAGCGGACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              876 TGGGGCTGGTGAAAAGGGCCGTTGAAAGGAGGAAAAGCCCTCTCCAGGCGGGCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1551 TGGCGCCGAGGAAGCCGATCGACGGCCCGAGCTGGGGAAACATGCCGAACCAGGCGCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  936 GACTGGCCGTGAGGAIGCGCCCCTGGAGAGCTCCCAGAGGCCCCGCGGGGTCGCCGCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                     ·;
                                        Length 1131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                        1056 CAGGCACAGGGGAGGCCCCCGTTCCCGGGCCCCGGAGCGCC 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1056 CAGGCACAGGGGAGGCCCCGTTCCCGGCCCCGGAGCGCC 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1371 TCGTAACCGGGAGGACGCCGATCAGGGTGGTGGACACC 1332
                                                                                                                                                                                                                                                                                                                                                                                                                                   981 TCGTAACCGGGGAGGACGCCGATCAGGGTGGTGGACACCC 1020
                                                                                     113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches 113;
                                        Score 39.2; DB 4;
Pred. No. 0.14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 39.2; DB 4;
Pred. No. 0.18;
                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1539, Application US/09252991A Patent No. 6551795 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4, Application US/09160496
Patent No. 6346613
GENERAL INFORMATION.
APPLICANT: C'Mahony, Daniel J
APPLICANT: C'andony, Gerard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Pseudomonas aeruginosa
                                          2.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2.1%;
                                                                                   Matches 107; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 107; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-252-991A-1539/c
US-09-252-991A-1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-252-991A-1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
US-09-160-496-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
                                                                                                                                                                      qq
                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                             QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                               QΫ
                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q\underline{y}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             òγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: MARC J. Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR FILING DATE: 1999-02-18
PRIOR FILING DATE: 1999-02-18
PRIOR FILING DATE: 1999-07-18
PRIOR FILING DATE: 1999-07-27
NUMBER OF SEQ ID NOS: 33142
                                                                                                                                                                                                                                                                                                                APPLICANT: MACC J. Rubenfield et al.

TITLE OF INVENTION: AERGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILLE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR PLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR RILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGCGCTCCCAAAACAACATCTACAGCGCCTGCCCGCGGCGCGCTCGTGGAGCGGACGCTG 1055
               1044 GAGCGGACGCTGCAGGCACAGGGGCCCCCGGTTCCCGGGCCCCCGGAGCGCCGTTGCCCC 1103
                                          876 TGGGGCTGGTGGAAAAGGGCCGTTGAAAGGAGGAAAAGCCCTCTCCAGGCGGGCCCGCC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               936 GACTGGCCGTGAGGATGCGCGCCCTGGAGGTCCCCAGAGGCCCCGGGGGTCGCCGCGGAC 995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           464 CGCAGGCCCTGGCCGAAGCGCAGCACGCAGCAGCAACGCCCCAGTAGCCGATGCTG 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    584 TGGCGGCGAGGAAGCCGATCGACGGCCGAGCTGGGGAAACATGCCGAACCAGGCGCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 636;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .056 CAGGCACAGGGGGGCCCCGGTTCCCGGCCCCGGGAGCGCC 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404 TCGTAACCGGGGAGGACGCGATCAGGGTGGTGGACACCC 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.1%; Score 39.2; DB 4; ... 48.6%; Pred. No. 0.1; tive 0; Mismatches 113;
                                                                                                                                                                                                                                                     Sequence 1441, Application US/09252991A Patent No. 655195
PREMAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1675, Application US/09252991A Patent No. 6551795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Pseudomonas aeruginosa
                                                                                                   1104 CCGCCCCGCTGC 1115
                                                                                                                                  984 CIGCAGCICCGC 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 2.18
Best Local Similarity 48.69
Matches 107; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION: APPLICANT: Marc J.
                                                                                                                                                                                                          RESULT 12
US-09-252-991A-1441/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-252-991A-1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-252-991A-1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH
                                                                                                                                         Dp
                                                      qq
                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ^{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          748 CAGCTACAACCACCACACACGCTGCACAGGCAGAGCACTGGACTATGGCTCACAGTC 807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            808 IGGGAGGGAAGGCCAAGGATTICACATCCTGATCCCGACCATCCTGGGCCTTTTCCTGCT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          868 GGCACTICTGGGGCTGGTGGTGAAAAGGCCGTTGAAAGGAGGAAAGCCCTCTCCCAGGCG 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 928 GGCCCGCCGACTGGCCGTGAGGATGCGCCCTGGAGGCTCCCCAGAGGCCCCGGGGGTC 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
TITLE OF INVENTION: Composition and Method for Enhancing Paracellular TITLE OF INVENTION: Transport across Cell Layers
FILE REFERENCE: Docket No. 6346613: 98 9.1070.US
CURRENT APPLICATION NUMBER: US/09/160,496
CURRENT FILING DATE: 1998-09-24
EARLIER APPLICATION NUMBER: US 60/059,644
EARLIER FILING DATE: 1997-09-24
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 4
LENGTH: 1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Gallus gallus
ORGANISM: Gallus gallus
PUBLICATION INFORMATION:
TITLE: Occludin: A novel integral membrane protein localizing
TITLE: at tight junctions
TITLE: at tight junctions
OURNAE: J. Cell Biol.
VOLUME: 123
ISSUE: 6
PAGES: 177-178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 2.0%; Score 38.4; DB 4; Length 1920; Best Local Similarity 47.5%; Pred. No. 0.34; Matches 114; Conservative 0; Mismatches 126; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DATE: Dec 1993
DATABASE ACCESSION NUMBER: D21837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      οg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΫ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
```

Search completed: September 14, 2003, 02:14:02 Job time : 129 secs